This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

109

75

BOSTON MEDICAL LIBRARY
in the Francis A. Countway
Library of Medicine ~ *Boston*

TRAINING AND REWARDS OF THE PHYSICIAN

Louis Pasteur.

LIPPINCOTT'S TRAINING SERIES

TRAINING AND REWARDS OF THE PHYSICIAN

BY

R. C. CABOT, M.D.

AUTHOR OF "WHAT MEN LIVE BY"

BOSTON MEDICAL LIBRARY
IN THE
FRANCIS A. COUNTWAY
LIBRARY OF MEDICINE

PHILADELPHIA & LONDON

J. B. LIPPINCOTT COMPANY

BOSTON MEDICAL LIBRARY
IN THE
FRANCIS A. COUNTWAY
LIBRARY OF MEDICINE

COPYRIGHT, 1918, BY J. B. LIPPINCOTT COMPANY

PUBLISHED JANUARY, 1918

PRINTED BY J. B. LIPPINCOTT COMPANY
AT THE WASHINGTON SQUARE PRESS
PHILADELPHIA, U. S. A.

1
P
126

CONTENTS

PART I.

THE PREPARATION OF THE PHYSICIAN

CHAPTER		PAGE
	INTRODUCTION	13
I.	THE PROFESSIONAL TYPE OF DOCTOR AND THE PREPARATION FOR IT	18
II.	THE TRAINING OF THE FAMILY PHYSICIAN	37
III.	PREPARATION FOR PUBLIC HEALTH WORK	60

PART II.

HELPS AND HINDRANCES IN THE DOCTOR'S DEVELOPMENT

IV.	CONDITIONS OF FAILURE IN PRACTICE	69
V.	FACTORS OF SUCCESS	79
VI.	THE CHANCE FOR THE YOUNG DOCTOR	84
VII.	CITY PRACTICE VS. COUNTRY PRACTICE	91
VIII.	THE INFLUENCE OF DRUGLESS HEALING, CHRISTIAN SCIENCE, OSTEOPATHY AND OTHER SPECIAL CULTS ON DEVELOPMENT AND SUCCESS OF THE DOCTOR	96
IX.	THE INFLUENCE OF IMPORTANT PUBLIC HEALTH "CRUSADES" ON MEDICAL DEVELOPMENT AND MEDICAL PRACTICE	105

FEB 2002/9:47

X. The Health Crusades Against Typhoid, Malaria and Other Preventable Diseases..... 120

XI. The Private Practitioner's Competition with Group Medicine..... 123

PART III.

THE REWARDS

XII. The Rewards of Medical Work..... 133

ILLUSTRATIONS

PAGE

Louis Pasteur.....*Frontispiece*

Types of Prescription Writing..... 38, 39

Considered the best in the city with one exception (1911). Selling 100 gallons of milk..... 62

Same plant, modern and sanitary in every respect (1915). Selling 1000 gallons..... 64

A Clinic of Dr. Agnew..... 70

Playthings—an aid in the office when examining young children..... 116

A Mosquito-map of New Orleans; fly maps should be made in the same way..... 121

PART I

THE PREPARATION OF THE PHYSICIAN

TRAINING AND REWARDS OF THE PHYSICIAN

INTRODUCTION

On a recent transcontinental trip, a Pullman car porter seeking medical aid for one of our fellow passengers, accosted me with the surprising question: "Aren't you a doctor, sir?" "Yes," I answered, "but how did you guess it?" "Well, I can most always tell 'em by the looks," he said, but he could analyse his methods no further. Was it the result of the doctor's training which the porter supposed he could recognize? I fancy not. A certain type of men, I think, is attracted into the profession of medicine, just as another type of man is attracted into the ministry. Those who answer medicine's peculiar call have certain traits in common. Thus it is, I believe, the raw material rather than its preparation that determines most of a doctor's recognizable make-up.

As one recalls the notably successful doc-

tors in one's acquaintance, is it not obvious that their successful attack upon their professional problems is due mostly to native, inborn qualities? Preparation, training do something also, but they seem to me minor factors. It is among the unsuccessful doctors that the professional manner and the tricks of the trade are apt to stand out. Surveying the doctor as a finished product I conclude that he, as a "going concern," makes good largely by the social tact, the persistence, the ingenuity, the "horse sense" that are born in him or bred into his pre-professional boyhood.

However, training, *especially the trainer,* counts for something. Prolonged daily, intimate contact with teachers or medical "chiefs" whose character has a clear outline and a strong color may influence a medical student for life. And such contact is not impossible in medical training now that the bad old custom of teaching by lectures is being supplanted by better methods. One learns medicine as one learns philosophy, carpentry or book-keeping, in two ways:

(*a*) By practising it.

(*b*) By imitation of good models.

In medicine the "gold models" are easier to find and to watch than in most other fields of work. Hence, in the preparation of the doctor, his native outfit of talents and sympathies has a good chance to be increased by something beyond what he discovers for himself in practice. That "something" is the ideals of teachers whom he admires for competence or brilliance in his own chosen field. These ideals may be good or bad, but in any case they are apt to become implanted in the student and to influence his behavior for good or evil.

This result is especially common when a group of teachers reënforce each other's influence upon the student. The "spirit" of Johns Hopkins, the "traditions" of Guy's Hospital, the "atmosphere" of the Massachusetts General Hospital are powerful composite influences made possible by the grouping of like-minded teachers. Especially when the world's counter-currents are excluded as in a monastic life, a military

school or a medical teaching group character change is actually wrought.

The *sort of trainers* to whose influence a medical student should try to expose himself depends on what type of physician he wants (or hopes) to be. In the end he will fall into one of four groups:

(*a*) The *research-and-teaching* man,—"the professor,"

(*b*) The old-fashioned *family physician,*—guide and counsellor to his town,

(*c*) The *expert middle-man or specialist* who becomes an efficient machine for *applying* in diagnosis and therapeutics the science worked out by men of type *a.* This group includes men who practice general medicine as consultants; it includes also those who confine their work to surgery, obstetrics, nervous disease or one of the other recognized "specialties."

(*d*) *The public health* officer or sanitary engineering type of physician.

I recognize that it may be difficult or impossible for a student to know in advance which of these parts he wants to play. But

this objection applies also to the choice of medicine itself. How can a man prepare for medical study if he doesn't know until the last minute that he is going to study medicine at all?

The answer is that *some* men do know. For them this book is intended. For them it may also be possible, when confronted with a description of four medical types, to recognize in one of them the fruition of their own budding ambitions. Then they can seek it.

CHAPTER I

The Professional Type of Doctor and the Preparation for it.

In Germany, Austria and Russia the "Herr Professor Doktor" is a figure so well-known that immigrants from those countries are prone to ask for him when seeking medical assistance in America. He attaches himself to some university at a modest initial salary and looks for promotion within or outside his university as a reward for production; i.e., for researches pursued and published. Within the past ten years American medical schools have grown accustomed to the idea of calling men from other cities to a medical teaching position. Formerly these positions were all filled by the "favorite sons" of the locality. Indeed it could not be otherwise since little or no salary was paid to medical professors. The chairs were sought and filled because of the prestige and influence attached to them and

the professor was not supposed to give much time to his work. He continued his practice and did his teaching " on the side."

Of late years, however, about a dozen American universities have begun paying decent salaries to medical professors. In view of this the universities now expect both clinical and non-clinical teachers to give full time or at least a large and definite fraction of their time in return. This makes it possible to call the best man in sight from any part of the country. The salaries are not large, but they are secure and eliminate the worry of financial uncertainty which weighs so heavily on the majority of practicing physicians today.

The duties of a professor are four: 1. teaching; 2. research and writing; 3. the stimulation and supervision of other men's research; 4. administrative work and committees.

In preparation for the most important of these duties the student should develop his scientific appetite by the cultivation of the auxiliary medical sciences—physics, chemis-

try and biology, not in an attempt to gain mastery of them but to catch their spirit. For it is a common impulse that runs up through these sciences to medicine itself, and one who nourishes this impulse in any natural science will find it applicable to medical problems as well.

The *fire of curiosity,* as to how nature works can be started in physics or biology and later will fasten itself on medical or physiological problems with heat unabated. Urgent curiosity about any natural science is usually not a natural but an acquired taste, because it is unworldly, or, as we say, "unpractical." There is no money and no fun in it. It means work and its goal is not at all obvious at the start. Nevertheless curiosity, like most instincts, is developed by use. *When once you get started* on a hunt for the understanding and mastery of nature, the hunt itself soon becomes fascinating. To find what is just out of sight,—around the next corner, becomes almost a passion when our blood is up and the chase is under way. It is the exploring instinct, not easily set in

motion but hard to stop when once it has gathered speed.

It is most often started (like disease) by contact with some one who has it already. Hence during the college period a boy should try to "get next" to a really enthusiastic professor of natural science—in any branch. It matters little what science is studied. But it matters vastly to find the genuine enthusiast. He need not be a good teacher—nor even a teacher at all. He may be a fellow-student. But he must have a quite miraculous fire of zeal, a zest not explainable by any of the common "sensible" motives such as earning one's living or doing good in the world, or having a good time or becoming the boss. In short he must be one who acts from "queer" motives and pursues intangible ends.

To see anyone very hotly in pursuit of something,—a thief, a fire engine—no matter what,—will often make us drop our sensible tasks and join in the chase even though we are but vaguely aware of the quarry. This is as true of scientific pursuits as of humbug

or hunting. In the beginning, at any rate, we are not after Truth or any such abstraction. We want to find out the *working* of some piece of nature as we want to take a clock to pieces and see what is inside. Concealment, the baffling of aroused curiosity and the desire to master, all contribute to keep us busy until habit begins to get hold of us and, like a balance wheel, to swing us along when spontaneous energy lapses.

College boys who catch the scientific fever from some adjacent enthusiast, are apt (if the enthusiast is a man of real power) to become interested in *him* as well as in his experiments. Thus the scientific habit of mind is brought more or less within a boy's ken,—first as a strange, austere and forbidding habit, but later as the completed image and fulfilment of what his own mind is trying to be. Thus as an athlete attracts younger boys, the mature lover of natural science becomes the model on which a student forms himself.

What qualities will the undergraduate find in the scientific investigator?

THE PROFESSIONAL TYPE OF DOCTOR

1. THE EXPLORING INSTINCT

A hunter and explorer he finds in the scientific enthusiast. Exploring beside him he begins to taste not only the familiar flavor of excitement in the hunt, but the stranger flavor of nature itself,—the tang of wildness, the bitter-sweet contrast with "civilization." For nature is as wild and untamed when we meet her in the behaviour of the human stomach as she is on the Amazon or at the Poles. There is a characteristic and amazing difference between our ways and hers,—that is, between what man's will consciously makes and what nature makes in his body outside him.

If you or I had planned the human brain we should have made both halves of it alike. But Nature has planned it so that an injury on its left foreward end abolishes speech while an injury to the corresponding spot on the right side leaves speech intact. A human architect after arranging for two lungs and two kidneys would certainly have provided two livers and two spleens. Nature prefers asymmetry here,—one liver and one spleen

only. Yet not asymmetry everywhere. The child's hands at birth are extraordinarily alike. Only by practice he becomes "right handed."

The undergraduate looking forward to medical study and seeking to prepare for it by absorbing the scientific spirit will find (if he looks with the "prehensile eye") that the lover of nature's secrets is deeply versed in the contrasts between man's and nature's ways. When a student who has been engaged in a piece of investigation brings his teacher a result that is just what anyone might have expected—a result deeply tinged with man's ways of thinking or manufacturing—the teacher at once suspects slovenly work. If nature is represented as full of right angles and perfect curves, as *wholly* verifying our first hypothesis and matching someone's thought exactly—the naturalist "smells a rat." He knows that nature doesn't behave so, that her lines are almost always characteristically irregular, disappointing and unpredictable.

This sort of instinct for the irregularity or

" wildness " of nature in contrast with man's smooth and tame ways, is one of the " scientific habits of mind " which students admire and may catch. Because we can't know anything perfectly until we know the whole universe which circulates through it like blood, therefore our knowledge about any natural object, however simple, always contains a residuum or surd that is stubbornly unknown, though never unknowable. This residuum stands for all the future discoverable knowledge about the object. The stars follow their courses *pretty nearly,* not exactly. The perturbations which make our figurings sometimes or somewhere imperfect represent all we don't yet know about the matter in hand.

2. AUSTERITY

Recognizing all this, the scientific student is apt to present certain austere or iron aspects to the beginner. Human weakness, intellectual rather than moral, is his ancient enemy and he is armed and mailed against it. Intellectual vices such as the tendency to twist our results to suit our preconceptions

are so familiar to the scientific student that he has steeled himself against them. Any evidence of impatience or of intellectual dishonesty in the myriad forms of " softness " he is prepared to repress. Whoever expects quick results that have value, whoever shows the tendency to take short cuts which avoid the necessarily arduous high roads of science, faces a frowning challenge from the seasoned investigator.

3. KEEN PREPAREDNESS AGAINST COMMON FALLACIES

Another mental habit which the student learns by contagion from good teachers is the aptness to perceive and the *wariness to avoid, certain ancient and tempting fallacies,* —classical twists of reasoning which entrap almost everyone again and again until he has learned to avoid them. The commonest is expressed in the Latin phrase *" Post hoc, ergo propter hoc,"*—(after, therefore because of). The patient takes iron and recovers. Therefore, we fallaciously suppose, the iron cured him. The ball team acquires a mascot

and wins. Therefore (ball players say) it wins because of the mascot's presence! One sits in a draught and next day has a cold. Therefore the draught caused the cold. We had prosperity after the new tariff went into operation. Therefore the tariff caused the prosperity.

Everywhere this form of stupidity emerges to lead us astray. But it is no one's business to combat it more frequently than the scientific student. He fears it as the burnt child fears the fire, because he has suffered from it.

A second fallacy, exemplified daily in our medical journals, is the tendency to wide generalization from one case or from a few cases. "All men are cross before dinner," said a long suffering wife of my acquaintance. No wonder she thought so, for her husband and her grown-up son were almost the only males she encountered and their tempers were certainly not sweetened by hunger. But, until it was pointed out to her, she was quite unaware that she judged all mankind by two examples.

By similar shortsightedness we ordinarily

argue from too few experiments in the field called scientific. "Typhoid fever will get well if treated with drugs which kill the bacilli of typhoid in the intestine." So argued many doctors a generation ago. They had treated a few cases in this way and recovery had followed. But if they had continued to treat cases in this way until one thousand or more had been seen, they would have discovered that some groups of typhoid cases are mild and get well under any treatment or no treatment at all, while others (not waited for when the cure was announced) are so severe that neither this drug nor any treatment yet known can prevent death in 10 per cent. or more of the cases.

We argue from a sample, supposed to be a fair sample of all the rest. But often it isn't,—as in typhoid fever,—because epidemics vary in severity.

A student can learn this sort of thing in any science and under any first-rate teacher before he gets to medicine. What a boon to humanity if all students learnt it before they began to "practice" on the human body!

4. SCIENTIFIC IMAGINATION

The preparation of the student for the type of medicine in which investigation will be his daily work should include contact with teachers who know not only how to avoid ancient pitfalls or fallacies, and how to recognize the contrast between nature's ways and our ways, but also *how to speculate* or how to wonder.

Speculation and verification are the two essentials of scientific progress. Each plays into the other's hands; each is useless without its team mate. But much more has been written and said about the experimental or verifying side of the scientific work than about its speculative side. Hence the student's preparation is apt to be neglected just here. Even the word speculation may be unfamiliar to him outside of stock markets, real estate dealings and the philosopher's chamber.

But in its generic sense the capacity to *speculate* is the capacity to wonder or be curious about something. Millions of folks had

seen an apple fall before Newton speculated on the event. Most of us are so used to the facts around us that we rarely *wonder* about them and are still less prone *to wonder if* a truth can't be found in them. We endured our short winter afternoons for centuries before it occurred to anyone to *wonder if* a city couldn't vote to put its clocks back an hour and have an hour's more daylight at the end of the working day. Of course the hypothesis had still to be verified and in my city it hasn't yet been verified as it has in Cleveland and elsewhere. But the capacity to wonder was what made it possible to experiment and, having tried longer and shorter daylight, to hold fast the better.

This capacity to "*wonder if*" means creative imagination, the rarest and most valuable asset of a useful man. It is hard to find and harder to train. The capacity to wonder makes it possible to test out new ideas in experiment. But the capacity to test out ideas by experiment doesn't make it possible to have any new ideas or wonderings of value. Hundreds of men can test out an idea for

every one man who can invent the idea. For that is what it comes to. The power to "*wonder if*" is the power to invent; it is originality.

Presumably one can increase his native stock of originality—large or small—by using what one has, as one strengthens a weak muscle by using it. Necessity, of course, is the most fruitful mother of invention but necessity is hard to fake—hard to replace by any artificial substitute. Educational substitutes for necessity (as the mother of invention) are just what educators find it hardest to invent,—because there is no necessity that they should! Honors, credit marks (and discredit marks) financial rewards or losses are the stimuli ordinarily used to stimulate necessity. But they are poor substitutes.

Better than any of them, probably, is close appreciative contact with an inventor. By contagion the student's embryonic inventive capacities may perhaps be reached and inflamed. But this sort of preparation is certainly difficult to get. It means prolonged intimacy with a teacher and few can be within

range of the teacher,—close enough for his emanations to hit and leave a mark. The real disciples who catch the master's spirit must always be a few *per* master and the masters themselves are hard to catch.

Still, I believe that if the supreme value of the capacity for speculation was realized, more might be done to develop it. As matters are now the showy and obvious side of scientific work—the laboratory verification or refutation of new ideas, the technique of finding out whether they are true or not—is what engages attention and constitutes the visible and tangible work that the public calls "scientific." Yet this is easy to do and easy to buy compared to that rarest of all capacities—*the capacity to have an idea worth testing out.* Anybody can have an idea. But few of them are worth testing out, as the theses presented yearly for Ph. D. degrees abundantly testify. These essays are often "original work"—but work not worth doing.

Stevenson describes his own creative work in terms of *brooding* on eggs. To have an idea is good. But to brood on it long is

better. Brooding in this sense means keeping the idea "in the back of one's head"—without dropping it, yet without any conscious attempt to work it out. In fashionable terminology this means the habit of "*using one's subconsciousness*" fruitfully. But here we approach a region little explored. How consciously to direct our subconsciousness is an art of which little is known and less still communicated. Stevenson's bread and butter depended (he thought) on this art of "brooding" long on his subject before he began a piece of writing. Almost everyone has had the experience of thinking hard on a matter, laying it away to take up other activities, and then returning to find it developed amazingly beyond its state when last envisaged. Business men have told me that their best ideas for new business are apt to come into their heads on holidays or at odd times away from the office. "I'll sleep on that before I decide" indicates a similar expectation of benefit to accrue from the unconscious activities of our minds.

How then can students preparing for

medicine be trained to brood? No answer has yet been given.

Ostwald, the famous physical-chemist, and Tschaikowsky, the greatest modern Russian musician, both advocate routine work as the best encouragement of invention. Neither found any benefit in waiting for ideas or in any deliberate brooding process. Both advise us to work away daily at whatever comes to hand. "Whoever works hard will find something" says Ostwald. Tschaikowsky forced himself to write *something* in the way of music daily, until of a sudden, inspiration would seize him and he would begin to have musical ideas worth perpetuating.

Whatever technique is best, the state of mind out of which this side of scientific capacity comes is one in which one doesn't see things as they are but as they *might be.* It is a capacity not to open our eyes and see but to shut them and think, or with open eyes to see the invisible,—the possible future or perhaps the impossible,—as verification may later decide. In a generation so obsessed as ours with the visible world, so smartly aware

of the present and so dull to the past and future, the capacity to see the invisible is not easily cultivated. Creative art and creative science spring from the same root, and the aridity of our artistic fields makes it improbable that great scientific creation will come at the present time.

Nevertheless whoever wishes to prepare himself for the "scientific" or professional type of medical work certainly should try to learn, through brooding, through intense labor, or through contagion, the art of speculation.

5. THE USED TOOLS

Another useful part of the student's preparation, during the years which precede the medical school, concerns the use of tools. In biological sciences most of the essential technique of medical research is employed. Familiarity with the use of the microscope, of the smoked drum, of charts and curves recording accurate measurements, as well as some acquaintance with the uses of mechanics and electricity in research, can be acquired in pre-medical studies. This is

even more obvious in the case of chemical technique.

French and German are tools which every prospective medical student should learn to use before he begins medical study, for experience shows that he seldom learns them later. Most medical men know just enough French and German to be useless—just enough to make them " side step " when the need for these languages appears in sight.

CHAPTER II

The Training of the Family Physician

1. Medical Schools and Hospitals

The technical side of a general practitioner's work is to be learned in the medical schools and especially in his period of hospital *interneship* intervening between medical school and the beginning of practice. Of this period the only thing to be said here is that the students should be content only with the best schools and the best hospitals. Second and third best will not do. The doctor may be handicapped for life because of a penny wise pound foolish policy in this matter. He often goes to the *nearest* medical school or to the cheapest in his vicinity. But this is bad policy for anyone who is not too poor to borrow money. Better start practice with a money handicap than hampered by poor training. The former can be made up for much more easily than the latter.

Good medical schools are those which provide:

1. Plenty of experience with patients in hospitals.

2. Plenty of teachers to make this experience intelligible.

3. Plenty of money for laboratories and salaries.

The number of schools which provide these three essentials within the borders of the United States is not large. But it is sufficient. Few good schools are as yet over crowded. It is only the poor schools which are over crowded. But the outlook is hopeful for the number of medical schools of low grade has diminished rapidly in the last ten years and the standards of those remaining are rising—because they must, owing to competition for students.

To get into one of these schools is an essential of good preparation for the American general practitioner or specialist.

2. POST GRADUATE STUDY

There is no longer any need to go abroad for general medical improvement after graduation. American post graduate in-

℞

For baby May
Syr Prunus Virg ℥ij
Tr Opii ℥ss
Syr Tolu ℥iss
Sig. A teaspoonful
as directed

Faulty prescription

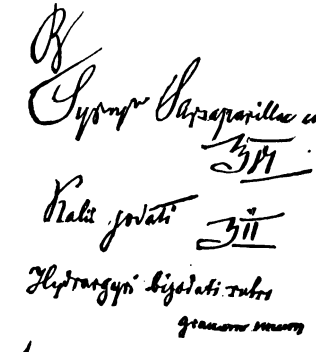
℞

Brom of Ka
ʒ v ℈i
Hydrate of chloral
℈iv
Aq Menthe pip ℥i
Syr Simpl ℥i
M.S. A teaspoonful at
Bedtime in mingles of
water

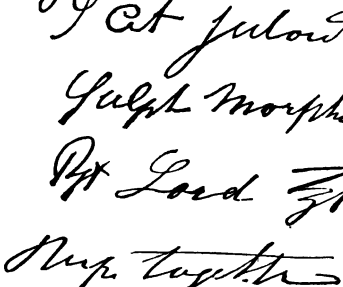
Odd prescription

Practice of Pharmacy (Remington).

Types of prescription writing.



Careful prescription



Badly written prescription

Practice of Pharmacy (Remington).

Types of prescription writing.

struction has now caught up and passed that for which Americans formerly went to Germany, to Paris or to London. For special points, of course, a medical virtuoso may have to be sought out in one or another European city; but this is rarely the case immediately after graduation. The majority of Americans who have gone to Europe in recent years for general medical improvement have, I think, wasted their time. A good many have told me so. Later on, after one has been in practice some time and has come through reading to know some special point on which the personal contact with a particular man in Europe is essential (and attainable) as a step in one's growth—a dash across the sea for a few weeks is sometimes worth while. But no more of the months and years in German clinics. Today that is waste scientifically and sometimes harmful in other ways. To witness, without protest, such inhuman and brutal treatment of patients as is common in German clinics is not, I believe, innocuous to post graduates. German brutality and callousness is as notable in peace as

it is in war, though we medical men have said all too little about it in the past.

3. THE PSYCHICAL ASPECT OF A GENERAL PRACTITIONER'S PREPARATION

Thus far I have dealt only with the technical side of the practitioner's training. But many practitioners have felt keenly in later years their own lacks and the lacks of their training on the non-technical side. The answers to a questionaire recently sent out by Dr. Arthur B. Emmons, 2nd, director of the Appointments Bureau of the Harvard Medical School, were very instructive on this as on many other points;[1] 132 of 317 who answered the questionaire gave specific reply to the question: "What, if anything, was lacking in your Medical School course to fit you for your particular work?" These 132 answers were classified in the following way:

[1] The Profession of Medicine. A collection of letters from graduates of the Harvard Medical School, edited by Dr. Arthur B. Emmons, 2nd, Harvard University Press.

TRAINING OF THE FAMILY PHYSICIAN

List of Lacks

1.	Pharmacology and therapeutics (*i.e.*, drugs)	58
2.	Clinical (*i.e.*, bedside) instruction	12
3.	Business training	11
4.	More practical hospital work	6
5.	Surgery (enough for general practice)	5
6.	More preliminary education	5
7.	The art of the practice of medicine	4
8.	A personal advisor	5
9.	Physical examination for tuberculosis	1
10.	An appreciation of the value of reading	1
11.	"Teach men to think"	1
12.	"Almost everything"	1
13.	"Not enough of little things"	1
14.	Skin diseases (diagnosis)	1
15.	Bacteriology	1
16.	Psychiatry	1
17.	Neurology	1
18.	Tropical diseases	1
19.	Public health training	1
20.	Clinics on skin, eye, ear, etc.	1
21.	"Too little money"	1
22.	"Too old in beginning"	1
23.	Nothing lacking in training	12
		132

List of Lacks

In this list items 6, 7, 8, 10 and 11 are especially suggestive of what is ordinarily left out of medical preparation—namely, the *preparedness for treating a human being as if he possessed a mind, affections, talents, vices and habits good and bad,* as well as more or less diseased organs. Admitting that it is difficult and uncharted ground over which we must go when we try to teach the "human side of the medical practice," yet the attempt should at least be made. For the psychical side of practice is more than half of a practitioners job and makes or mars him,—makes him by honest means or by quackish arts, mars him through his clumsiness or through his onesided concentration on the physical aspects of disease.

HUMAN PSYCHOLOGY NOT NOW TAUGHT IN MEDICAL SCHOOLS

Men intending to study and to practice medicine must face the fact that medical schools now give practically no attention to the psychical side of the doctor's work. Real-

izing this, the prospective student may perhaps make up for the lacks of his medical school years by extra attention during his premedical years to the subjects which he knows will be neglected by his medical teachers. Instead of having, (as now) to "pick up" knowledge and skill in such matters as best he can during the hazardous and distracted time of his start in practice, he may perhaps learn something of the art of human intercourse before he enters the medical school.

YET IT CAN BE LEARNED

How to deal with people: that is the problem. Many a man never learns how to deal with horses and knows his lack. Horses are skittish or "wicked" or confused when a greenhorn essays them. So are human beings,—often really "skittish," shy, sullen, resentful, prejudiced, stubborn or "wicked" when we approach them clumsily. Children especially may be deemed "wicked" under these conditions.

Nevertheless, as people can learn (if they must) a good deal of the art of dealing suc-

cessfully with horses or with children, so it is not impossible to acquire something to add to our native stock of mother wit in the art of human intercourse with folks in general. One need not leave this whole field to instinct and inherited knack. Witness the not wholly unsuccessful attempts to train salesmen and saleswomen.[2] The training of public readers and of actors is not altogether unlike the training needed by salesmen and bears some analogy to what doctors need. How to get his idea or his feeling across to the public is the actor's task. He can learn a good deal about the right and wrong ways of touching or reaching an audience, feeling its pulse and controlling its emotions. The doctor, too, tries to touch, to reach, to control his patients and must learn something of the art if he can, before he starts in practice. The salesman learns to size people up, to understand their more aggressive and their more vulnerable sides, to recognize the ways of "handling" different types. He learns, in short,

[2] Classes started by Mrs. John T. Prince at the Boston Women's Educational and Industrial Union in 1906.

the psychology of human approach. He learns to deal with men in one way, with women in another, with Irishmen, Yankees, Southerners, Jews, Scotchmen, each in a different way.

All this is equally necessary in the education of a doctor. But, as I have said, he is never taught it. In fact, during his experience as a hospital interne he tends to forget whatever he had previously learned as to the "humanities," to discard whatever he had known of human feelings, fear, delicacies, aspirations, and especially to ignore the *differences* of individuals and their need of individual treatment. The rush and routine of hospital work tend to obscure all this, and the young doctor at the end of his interneship is often more nearly dehumanized than at any period in his life—before or after his hospital year. All the more essential, then, as I see it, that he should learn in his premedical days all that he can of the art of success in human intercourse.

This art is to be learned like everything else, by practice and by imitating good models. Anyone can practice in daily life

the two complementary parts of the art—first the art of comprehending another person and second, the art of making one's self understood. Ordinarily we " get across " to others only a fragment of our ideas and a still smaller fragment of our emotions. Yet actors and salesmen learn to communicate enthusiasm as well as fact. They marshal their points and make them.

Of course the first essential is to know what we want to convey. Few are clear about this until the end of much random talk. But our heads may be cleared without noise. Thought is quicker than speech and it is more decent as well as more effective to clarify our muddy brains in private than in public.

Then, taking another leaf from the salesman's book, one may select one's *"talking points."* Salesmen know that among the facts which they might adduce in the effort to win a customer, there are some more attractive than others—some that catch attention, enlist sympathy or tickle fancy. Such are good " talking points " worth memorizing and using again and again.

Again the salesman learns by experience that it never pays to get arguing with a customer in any way that may lead to antagonism of attitude. If you damn the article that a good salesman is trying to sell you, he will almost always agree with you, if he can see no other way to prevent antagonism. He tries with all his might to get your point of view and to agree with you all he can.

"These effervescent waters of yours are really no better than plain water," I said the other day to the agent of some "Hot Springs." "*Yes, it almost seems so,*" he answered soothingly, "and yet we've had wonderful results with them," and off he slid again on the current of his encomium.

Of course the honest doctor cannot truckle and yield to his patients as a salesman sometimes does to his client, but he will imitate the salesman to this extent at any rate—that he will avoid antagonizing his patient whenever this is possible without dishonorable submission. For antagonism is an atmosphere opaque to the transfer of almost all meanings. One can neither speak through it nor

hear through it. Yet one must both speak and hear effectively if one's daily medical tasks are to be accomplished.

"To convince another, first get his point. Then move the point. He follows."[8] But in a mood of antagonism one can neither get nor move the point. Hence doctors often acquire pacifist tricks. They become peace-at-any-price men in relation to their patients. Of course this is obviously wrong. There are times when one must resist a patient's will. He wants his child's scarlet fever hushed up, not placarded in red on the house door by the Board of Health. He may be angry enough to discharge a physician who insists on doing his duty in protection of the public. With such wrath one cannot make peace honorably. But it is amazing how rarely such antagonisms need be aroused if the doctor has himself well in hand and refuses to fight without good reason. A doctor, like a nation, can learn not to consider insult a cause for war. Though not too proud

[8] John J. Chapman "Causes and Consequences," p. 110 (Scribners, 1899).

to fight for the public good and the rights of civilization, he often learns that to resent an insult may help no one. Theoretically the doctor never loses his temper with a patient. That would be unprofessional, for temper is a manifestation of broken self-control and professional service presupposes self-control.

Now all this is hard. It should be anticipated and practised by the future medical student like the selection of "talking points" and the habit of wringing the water and the air bubbles out of one's ideas in private rather than in talk.

Practice, however, is only half of this education. It is inspired by watching experts and completed by imitating them. Many, especially many women and many Frenchmen, are expert in the long-practised art of human intercourse. One can sit by and watch a clever, sympathetic newspaper reporter "get at" the person he is interviewing. One can admire and absorb the power for "creative listening" possessed by many good women. Nor need one's choice of masters in the art be confined to the insignificant fraction of

humanity which is now alive and accessible to us in the flesh. No one ever understood people nor made them understand him as Jesus Christ did. His method and His spirit, seen best in His own words and actions, can also be studied in those of His followers—in St. Paul, in St. Francis of Assisi, in Joan of Arc, as well as in the truest Christians of one's own acquaintance.

Some appreciation of this sort of training as an essential in the family practitioner's training is suggested in Dr. Emmons' codification of Harvard graduates' opinions about the lacks in their training.[4] Three hundred men answered the question:

"In pre-medical education do you favor a predomination of (1) General culture, such as History, Philosophy, Economics, Literature, and Art?; (2) or, Natural Science, as Physics, Chemistry, and Biology?"

The men favoring sciences (the present trend) numbered 120, and those favoring general culture 110, while 70 favored both equally. This means that at least an equal

[4] Loc. cit., p. 11.

share of general culture with science in college education was favored by 180 out of 300 men. Science deals largely with the non-human world. The "humanities," history, economics, philosophy, and literature deal largely with the thoughts and relations of human beings. An acquaintance with the "humanities" in this sense favors the development of capacity to understand and to influence our fellows.

Besides the art of appreciating others' points of view and conveying our own, the doctor needs to know all he can of the Human Menagerie—the types and varieties such as Balzac hoped exhaustively to map out in his "Comedie Humaine." When a doctor is consulted by a stock broker or a cattleman, a laundress or an actress, he needs to know all that he can about what fills their days and their thoughts—the routine detail of their lives, what they take for granted, what they instinctively like and dislike, fear or admire. The ways and habits of old ladies, young "clubmen," candy-eating girls—the laxities and explosions called the artistic tem-

perament, the proportion of thick-headedness usually associated with "hard-headedness" in business men. For these are matters which may form the basis of a correct diagnosis and a successful course of treatment.

It is always poor policy to command a patient to do what one knows he won't or can't do. But without a considerable familiarity with the Human Menagerie one does not know what is possible in the way of abstinence, reform, or comprehension by one or another type of person. Women are sick oftener than men. They form a large part of any doctor's clientele. Most women care for religion. Most doctors do not. Hence a vast deal of misunderstanding and mismanagement by the doctors of the sex prevailing in medical work.

A considerable part of the doctor's task with tired, discouraged, or bewildered patients is to cheer them up. But with most of us the stock of cheering words and acts is very limited. Yet the art of encouragement is one capable of much cultivation and one does not need to be absolutely original in

the means employed with each sufferer. For, as the reasons for discouragement are very similar in the great majority of people, so the remedies may be similar without insult or injustice. Discouragement results from fatigue, from fear of the future, from the sense of failure (often an illusory sense), from recent rebuke, from money loss—but chiefly because to the mind of a person prone to discouragement $1 + 1 + 1 = 10$. A few successive disappointing words or mishaps, none huge in itself, seem to add up to an overwhelming total of hopelessness because he tends to take them as samples of all the rest of the events which are to overtake him in the remainder of life. As in the fallacy exemplified on page 26 we argue from a few facts to a supposedly universal truth, so in discouraged moods we allow our whole outlook to be colored by the tint of the last few days or hours.

Realizing this, one can sometimes remove a patient's " blues " by analyzing them, that is by eliciting the exact history of the particular train of three or four events which

have coalesced in his distorted vision to a lump of intolerable misery. When he comes to enumerate his distressing experiences, sees how few they are and how groundless his impression that the whole future will be as bad, he can often throw away his fears and laugh at his blues.

"Face the very worst that can happen," I have often said to discouraged patients, "and you will find it far less disastrous than your glimpsing apprehensions about it. Turn straight towards what you dread as we turn a horse's head towards the object he is shying away from, and you will find it can no longer scare you." For example: People are often a prey to depression and inaction because of some trifling disease in which they may happen occasionally to feel faint—in the street or in church. "Well," we say to such a sufferer, "face the worst. Suppose you did faint in church. It wouldn't do you any harm. You would lie down for a while and then come to again. Or if you were in the street you might have to sit down on a doorstep or a curbstone for a bit. Nothing

very awful about that. But what is more, if you get so that you don't care whether you faint or not, and are not constantly anticipating it, you probably won't faint at all."

I have written out these details to show what I mean by the psychical preparedness of the doctor as it should be and rarely is—the trained familiarity with the moral and emotional difficulties sure to be encountered in connection with illness and the trained readiness to meet them. Not that anyone expects to solve all his patient's psychical puzzles and twists. Often the most experienced physician fails in such matters. But "the readiness is all"; at any rate one need not be so obviously flabbergasted as to discourage the patient still further by the spectacle of our discomfort.

A rich and cultivated old lady was once brought to me by her son because, as he said, "She is crying herself sick. She has been grieving her very life out for a year over something that she knows can't be helped—my father's coldness to her and her own fear that he is interested in some other woman.

She knows she can't do anything about it and that crying only makes her worse; but she can't seem to stop. Lately she can't sleep or eat and we are getting really alarmed about her."

"How does she pass her time?" I asked.

"She just mopes," he answered, "she's given up all her old interests."

Obviously the first thing to be done was to discover and if possible revive some of these abandoned pursuits. I found on inquiry that she had years ago painted water-color copies of sea shells for a biological museum and that she had been at one time so expert in this that her work was in great demand. When I proposed to her that she take this up again she wept afresh. "No one wants my painting now," she moaned, "and I have completely lost what little knack I once had for it."

Now it is a familiar fact that a demand for what one can do, a real need for it, coming to one from the world outside, is the most effective stimulus that can be applied to an ennervated interest. Therefore to find or create such a demand for my patient's paint-

ings seemed to me the first thing to try. After some inquiry I found that there was still a need for shell-painting and that, through the efforts of her son, shell specimens could be brought to her house so that she could do her work there. The museum director was easily persuaded to write her on official paper a business-like letter expressing the desire of his board to enlarge the museum collection of colored drawings such as he knew from past experience that she could make. This letter awakened in the poor lady the first gleam of genuine pleasure that her family had seen for many months. Yet she still protested that she could not do it—had forgotten it all, etc., etc. Nevertheless she was easily lured into talk about the fascinating, gossipy details of water-color technic, the advantages and disadvantages of rough paper, of tinted paper, Japanese rice paper, sable or camel's hair brushes, the choice between squeeze-tube colors and moist color in pans. Even the racy old names of carmine, crimson lake, rose madder, burnt sienna, raw umber, Chinese

white, cadmium yellow and brown ochre, made her brighten up as she rolled them on her tongue and began to plan for a color box. Her faded interest in her house began to revive as we walked about its innumerable rooms choosing one where she could get the best light in the winter months at hand.

When she finally got to work she was surprised and delighted to find that her old skill was not gone. She discarded some of her first attempts, but after a few days settled down to the work and enjoyed it. Still she had lapses especially on Sundays when she thought it wrong to work and when her husband's failings were more than usually obvious. I then persuaded her to keep a diary in which she recorded, not her feelings, but her actions, including the number of times she cried each week and the duration of each cry. This diary had to be shown me at her weekly visits. Before long the irksomeness of having to record her weeping and the sordid detail of its bulk and frequency began to have a restraining effect.

"When I start to cry and then remember that I shall have to see what time I begin and

what time it is when I stop and then write it down and show it to you—I sometimes burst out laughing at myself and don't begin to cry after all."

* * * * * * *

The psychology that one needs in medical work is not to be found in the books on the subject. One picks it up from the novels of George Meredith, from Conrad's stories and Tolstoi, some of it also from Emerson's essays or from Shakespeare. Eventually I believe it will be written out in systematic text-book form; but so far it has to be sought in all sorts of books and, more often than not, in the chance treasures of conversation or in one's own memories.

* * * * * * *

Though patients often bring problems of metaphysics or of religion to their doctor and agonize about free will or immortality, I doubt if a student could profitably study these subjects with a view to helping his patients. He will study them primarily because of his own needs if he is the sort of person who is likely to be of use to patients thus puzzled.

CHAPTER III

Preparation for Public Health Work

The health officer is what the French call an "entrepreneur,"—much more nearly an engineer than a doctor of any type known hitherto under that name. He faces disease as a "proposition," a job to be put through and finished. The classical example of such a job was the work of General Gorgas and his assistants in controlling malaria in the Canal Zone. They did not wait for sick workmen to call at the doctor's office, but attacked the germ-pest in its lair, *i.e.*, in the marshy jungles along the track of the canal. There mosquitoes, the "intermediary hosts" of the malarial parasite, multiply. From them the parasite is conveyed to human beings and then through other mosquito-bites from person to person. Gorgas planned:

(*a*) To diminish the number of mosquitoes by draining and clearing the land where they breed. Without abundant stagnant

water and soggy marshes shaded from the sun by jungle, the mosquito cannot breed.

(*b*) To diminish the number of malarial patients accessible to mosquitoes which could carry his parasites to other men. This was accomplished by careful screening of all malaria-infected workmen during their treatment in hospitals.

(*c*) To kill off with quinine as many as possible of the parasites in men already infected.

(*d*) To make their blood poor soil for the growth of any parasite which mosquitoes might introduce during the men's work hours. This was done by having all workmen take a small daily dose of quinine.

The results of this work were to make it possible to build a canal where the French were unsuccessful because of mosquito-borne malaria and mosquito-borne yellow fever.

This great engineering feat was accomplished as much by the medical engineers as by the steam shovels and dredges. It has remained ever since the stock illustration and

effective inspiration of all who hope to stamp out disease by campaigns directed against its source, *i.e.*, of all who work for preventive medicine.

THE ENGINEER'S STANDPOINT ON MEDICINE

In preparation for work of this kind the student needs, besides his technical and clinical training, a firm grip of the engineering habit of mind. He must learn to think of disease in wholesale not in retail terms. Above all he must dissociate it altogether from the idea of profit or of getting a livelihood out of attendance on sick people. Since he is a salaried official whose success is in the diminution of disease and therefore of the doctor's profits, he must become accustomed to the constant though unspoken opposition of the practising physician. He will find that no matter how useful dispensaries are acknowledged to be in the campaign for public health, cities devoid of dispensaries always have trouble in starting them owing to the opposition of the local doctors. He must be reconciled from his outset to the split now

Considered the best in the city, with one exception. (1911.) Selling 100 gallons of milk.

opening wider and wider between the *Health* doctor and the doctor whose work is *sickness*. On the other hand, the Health officer finds himself in constantly closer alliance with public health nurses, with social workers, and with the better type of state and municipal officials of all kinds. For health is a common denominator in all public work; it is of interest in the police department, and the street department, in the schools and prisons as well as in the domain of the health officer himself. Every one needs his help and shares his success.

Familiarity with statistics, with charts, and with the methods of surveying or mapping out any problem such as a water supply or a paving system is of value in the preparation of a health officer. For he must survey a disease as a whole, trying to find out, for example, how large a problem is presented by the total tuberculous infection of Massachusetts—how many cases and how many deaths occur each year—how this total is distributed, whether it is increasing as a whole or in any particular localities, whether

it is especially common in any trade or at any age. Then he computes how much money is needed to make a successful attack either on the whole problem or on some manageable portion of it, submits his estimates, and tries to convince the legislative committees concerned. For he can never keep out of politics, and if he hates politics supremely he should seek some profession other than that of health officer.

* * * * * * *

The preparation of consultants and specialists is not different in its pre-medical and scholastic stages from that of general practitioners although in the end the two species are markedly unlike. The consultant emerges either from the professional or from the family practitioner type of doctor and the specialist in diseases of the eye, of the throat and ear, of the nervous system, etc., should by rights have a broad training in medicine and surgery on which to base his special work. Only in this way can the eye specialist avoid treating all patients as if they possessed eyes but no other organs or senses.

Same plant, modern and sanitary in every respect. (1915.) Selling 1000 gallons.

GOOD SPECIALISM VS. BAD SPECIALISM

A few words may be in order here on the distinction between proper and improper specialties. Diseases of the eye form a proper subject for special practice because the eye is subject to many maladies almost or quite confined to that organ itself. One need have only a good working knowledge of the stomach, the heart, and the other organs in order to treat diseases of the eye with skill and competence. But diseases of the stomach are not a proper subject for a specialty because no one can understand the patients who complain of their stomachs without knowing a great deal about many other organs. Stomach *complaints* are often due to diseases of the lungs, of the brain, or of the kidneys, while the stomach itself is perfectly sound. Those who call themselves stomach specialists, if they are expert only on the stomach must be bunglers. While if they are well versed in the usual troubles affecting other organs and know the stomach as part of a chain of interdependent members, they have

no right to attract patients by the quite uncandid epithet "stomach specialist" which leads the public mistakenly to suppose that they excel general practitioners in the understanding of the stomach—as the eye specialist really does excel him in knowledge of the eye.

The same strictures apply to the false specialty "gynæcology," or diseases of women. To know women's diseases one must know far more. In practice the gynæcologist generally includes appendicitis and gall-bladder disease in his province—though women have, of course, no monopoly of these troubles.

PART II

HELPS AND HINDRANCES IN THE DOCTOR'S DEVELOPMENT

CHAPTER IV

Conditions of Failure in Practice

Success and failure are not the most important things in the world. Of course one wants to attain success and avoid failure. We should not take this too seriously. To make a failure in the first field one attempts to cultivate may be one's best help towards finding a better. Only by such hard knocks are we capable oftentimes of being steered into our proper path in life. On the other hand, failure may mean that the world is wrong, not we. From many points of view Christ's life might have been called a failure and many a composer and inventor has failed to earn his living or to impress his generation.

On the other hand, success does not necessarily mean ability, far less virtue.

Nevertheless, no one wants to fail, and as I said, the great majority of failures occur not because the world is wrong but because of some quite avoidable blunder. Such

blunders I will exemplify from my own memory:

1. Many men fail because they do not keep up with medical progress. Every young man thinks when he graduates and settles down to practice that he is going to devote a good deal of time to reading. But as the years go on, he devotes less and less until to-day probably the medical reading of the majority of the physicians in this country consists in skimming very hurriedly the titles or contents of one medical journal a week. Under these conditions a man is bound to get seriously behindhand, unless he is fortunate enough to meet, in his hospital work or otherwise, groups of fellow practitioners who will enlighten him on sides of medicine with which he has not kept abreast. The chance to be checked up in this way is one of the greatest advantages of belonging to a hospital staff. Casual phrases let fall by other members of the staff as one hears them talking in a ward or a laboratory may awaken us to the fact that we do not even know the meaning of the words they use and that some-

A clinic by Dr. Agnew.

thing quite familiar to them is a blank to us. This stimulates further inquiry, perhaps further reading. The natural variations of men's interests and abilities supplement each other and stimulate all the members of such a group as I have just referred to. Of course if none of these men did any reading they would not stimulate each other much. But a little knowledge may leaven a sizable lump through the mechanism of a hospital staff group.

Next to the neglect of reading the failure to attend district medical meetings, state or national medical meetings is probably the commonest cause of falling behind in the march of medical progress. Such meetings are often dull and almost always a burdensome addition to the day's work, yet they are indispensable, especially for those who do not have hospital connections.

Still more stimulating but less available for all are visits to other cities and contact with the ideas and practices of various clinics and teachers. The richer and more energetic members of the profession are in the

habit of taking each year at least one trip to some centre of medical progress, not ordinarily to attend lectures or any routine teaching, but to look about and pick up such points as can be happened upon in a casual visit, to make rounds in a hospital ward with some well-known practitioner or to watch his work in an out-patient clinic. The regular members of the Mayo Clinic staff are required to take one month each year for such a journey of education. They visit, in turn, different clinics in this and other countries, and on their return to Rochester report to the rest of the staff what they have learned. To make such a form of mental rejuvenation not only permissible but obligatory is a most enlightened policy.

2. Men fail now and then—but much less often than fifty years ago—by reason of bad habits, especially alcoholism and morphinism.

In small towns patients often have to bear with such vices on the part of their physicians for a long time; but sooner or later people are likely to rebel or the competition of better controlled colleagues drives the

drunkard to the wall. One of the most encouraging things, however, about the medical profession to-day is the improvement of its habits in this respect, an improvement parallel to that which is notable in all the better educated groups of the American people.

Occasionally I have known a man fail from sheer laziness and neglect of his patients; but usually such laziness has been connected with some disease or with vicious habits.

3. Now and then a man fails because he becomes known as an abortionist. In some communities this practice is quite compatible with success; but medical opinion in most places is so strongly against it as a means of livelihood that the regular and systematic abortionist is liable to fall into disrepute.

4. Twice I have known men come near to failure because they chose the wrong place to settle in. A man should always settle among people whose ways and habits he likes, and not among those who are strange and unattractive to him. He may learn to adapt himself, but at the cost of great labor and pain. One of the best trained, most faithful

and most skilful practitioners that I have known came near to failure and was always near the danger line of a financial crash because he, a typically whole-souled and most refreshing Southerner by temperament, chose to settle in an old New England community whose manners he did not understand. The community understood him just as little and remained for years unaware that they were enjoying extraordinary good fortune in having a man with such ability and character settle among them. This man is now earning his living, but has never got anything like the practice and popularity which he deserves, merely, so far as I can see, because he settled in the wrong place. Another man, born and bred in New England, has made an excellent living in a western state of this country but has been chronically unhappy and discouraged because he does not like the ways and customs of the place in which he elected to work. To be perpetually annoyed and displeased with one's surroundings is to fail, even though one makes a good income.

With this and other examples in mind, I have always counselled medical students who are looking about for a place to begin practice, that they should choose no place which seems obviously uncongenial to them from a social point of view. If a doctor likes the people among whom he is to practice, they will probably like him and seek him. If he feels shy, constrained or bored in their presence, the experience will probably be a mutual one and he will suffer by comparison with others who feel more at home.

5. Occasionally a man gets into medicine who doesn't really like the job. Such a one warned me very seriously when he heard that I was thinking of studying medicine. "What on earth do you do that for?" he said. "It is a dog's life. No holidays, no Sundays, no evenings, nothing but a steady grind and mighty little thanks for it! Medical school and hospital service is good fun, to be sure, but after that it is an awful anticlimax." I have always been glad that I did not feel alarmed at this low-spirited advice, although it was given by a very sagacious

physician of large practice. Very obviously the whole thing was against the grain with him and I regard it as failure when a man has to drive himself on from a pure sense of duty in any profession which he chooses.

6. Although men of very various temperaments and characteristics have been happy and successful in medical practice, there are certain traits which go far I think to disqualify a man or at any rate to make his life's journey a steady up-hill drudgery. One of these is *indecision.* Some most exemplary and useful citizens are compelled by their nature or by their training to make all decisions slowly and with difficulty. Doubtless such persons can be happy and efficient in other callings; but it is almost impossible that they should get along smoothly in medicine. For in that profession decisions must very often be abrupt and irreversible. Anyone who finds such decisions difficult and burdensome will be unhappy in medical practice.

Others who are not really indecisive have not the capacity or the physique for leader-

ship. They do not convince patients of their clear-headedness and decision. They seem to patients to be following rather than leading, to be bored rather than eager, impassive rather than energetic. Patients almost always want clear leadership. They do not blame the man who doesn't give it—they simply go elsewhere. By great faithfulness and devotion a man may make up for the lack of decisiveness, but his success and satisfaction are likely to be very limited.

7. The majority of physicians in this country get very poor training yet many of them are saved from the failure which this would naturally imply because, through their own native ability, they make good, after entering practice, the most important lacks in their education. This is hard on patients, for it means that we have to learn on them what should have come to us through our medical school studies, and though, as I have said, most men do struggle out of the difficulties created for them by the defects of their training, now and then a man is unable to pick up

by the way the fundamental knowledge which he was supposed to have at the beginning.

8. Finally, I have known a few men fail because they could not get on with their fellow practitioners and were always in hot water over some trifle. Such a man has to be absolute monarch of all he surveys; else he is always in trouble. If he happens to settle in a place where there are other would-be-absolute monarchs in the medical field, his path is a thorny one.

CHAPTER V

Factors of Success

1. Naturally, I hold that a man succeeds by the virtue of the opposites corresponding to all the defects I have just named. He gains his ends by reason of good training, good habits, fitting temperament, right choice of his field of practice, and so forth. But I think it is worth while to mention certain reasons for success which happen to have been exemplified within my knowledge.

I remember once asking an old practitioner, just before I entered practice, how anyone ever got any patients. His answer has been very widely verified in what I have seen of medical success. He said: "One gets more patients by being faithful to the few one has." If you show real devotion, people pass the word along to others and you get known and sought after. This is a physician's best as well as his most graceful method of advertising. People notice a great deal

more than we think. I can remember my mother's comment after the first visit of a new doctor whom she had just called in on recommendation of an elder practitioner who had been our family physician but was now retiring from active work. "Dr. S. examined the baby all over," she said, "although he had nothing the matter with him except a cold." This rightly impressed her as a sign of thoroughness and care on the doctor's part and gave her confidence that his decision was correct. Having shown faithfulness in a slight case, she was ready to trust him when more serious matters turned up.

2. More disquieting is the success of those who acquire a large practice because of blarney and a "gift of the gab." I have often seen men grossly ignorant of the technique of medicine and quite unconscientious in their study of their patient's diseases, acquire a wide popularity and a large income because of their power to please, to flatter and to cajole their patients. Every physician has abundant need of all the social skill that he can acquire and honestly apply. The *suavi-*

ter in modo is fully as important as the *fortiter in re.* We are responsible for "getting it across" as well as for good intentions and clear ideas. But it must be confessed that social skill is often an accomplishment sufficient to make up for any degree of medical incompetence on the technical side of the profession. I like to believe that there is less room for this type of chicanery than there was twenty-five years ago and that the available space is constantly dwindling as people get more general knowledge of the body in health and disease and of the methods necessary for a correct diagnosis and sensible treatment. The more people see of the medical work done at hospitals and in connection with universities, the less they are likely to be fooled by a smooth tongue as a substitute for thorough medical study and constructive therapeutics.

3. A relatively small number of men acquire an important vogue and a permanent place in the community because they get hold of a new idea or transplant one to a new locality. The man who is the first to use

X-ray diagnosis in any given locality is likely to maintain the lead over his fellow practitioners. Similar leads are obtained and then lost in case one exploits an idea which is new but not true. This has been the case with most of those who have made a specialty of vaccines and vaccine treatments following the supposed discoveries of Sir Almoth Wright. Such reputations go up with the rocket and come down with the stick. The new and true idea may be a plan of organization, as in the case of the Mayo Clinic, or a wise choice of a specialty; not recognized before and not intensively cultivated by those with whom the individual must compete. The field of brain surgery is an example of what I mean.

4. Finally, a man may succeed by sheer natural ability without any special originality, without any unusual skill in pleasing people or any unusual devotion to unpleasant tasks. This type of ability is usually a capacity for falling on one's feet, no matter how often or how rudely upset, the capacity to meet new situations—in a word, re-

sourcefulness. It is the possession of the relatively large amount of this sort of capacity that makes Occidental nations thus far better practitioners than Oriental, who are more prone to be non-plussed in a new situation or to lose nerve when confronted with an emergency. From this point of view I would back the American doctor against the representative of any other nation.

CHAPTER VI

The Chance for the Young Doctor

A generation ago it was almost essential for the young doctor to grow a beard, and I can remember the strenuous efforts of my classmates in this direction during the concluding years of our medical education. To-day such devices are unnecessary. The young get really too good a chance in competition with those of maturer experience. The public is nervously alert in relation to the necessity of consulting an up-to-date man, abnormally apprehensive about the evils of being behind the times. Unless a young physician is really childish, he has nothing to fear from the scantiness of his years—at any rate in this country, and at the present time. Youth is at a premium and exerts, I think, even more than its normal claim upon our recognition and respect. The public is clearly aware, in fact, too clearly aware that the young man has generally been better educated medically than the older practi-

tioner. Great and revolutionary discoveries have recently been made (so the public thinks) in all directions, but especially in the field of medicine. The young man is supposed to be fully cognizant of these; the older man is assumed to be ignorant of them.

It hardly needs to be said that this view of the matter is radically incorrect. The young man may know a great many things, including a large number that are not so. He may altogether neglect methods of diagnosis or of treatment which happen just now to be out of fashion, for fashion is alarmingly powerful in medicine as well as everywhere else.

Nevertheless the young man should make all that he legitimately can out of this astounding readiness on the part of the public to believe that youth is no disadvantage. Since people are expecting him to be up-to-date, it is incumbent upon him to meet the expectation and to deserve success by keeping abreast with all that is solid in the changing surface of medicine, while estimating fads and fashions at their true value.

The genuine superiority of the older man, when it exists, may be due perhaps to the fact that he has had an opportunity to do a given operation more times than his younger colleague and has profited by the worth of his experience, learning something out of each case. The same thing holds true in diagnosis. An older man, if he has kept his eyes open and given himself a chance to think, has been able to develop his powers of diagnosis through the experience of the varieties which any particular disease, such as pneumonia or appendicitis may present and even render familiar to us when we have had time to encounter many cases. He is less likely to be fooled by superficial resemblances between one disease and another; less likely, also, to be thrown off the scent by the peculiar variations which every disease exhibits in the bodies of different individuals. For individuality shows itself in the way people take their diseases when they are sick, as well as the way they behave when healthy.

On the other hand, a man may have had an enormous experience of disease in the

sense that large numbers of cases have passed through his hands, and yet he may not have been alert enough or given time enough to get any experience or wisdom out of them. He may continue to see only what he has seen before, remaining blind to the unexpected and the new. This is true of us all to a most disquieting extent. Alcoholic paralysis of the legs, lasting for weeks after alcoholic excess, must have been seen by physicians again and again, ever since the days of Noah. Yet it was never recognized until the middle of the nineteeth century. So it is with the connection between joint disease and tonsilitis, which to-day seems so obvious that we can hardly believe that there is anything new about it, yet which we wholly overlooked until within fifteen years. The capacity for blindness to what is right under our noses is so deep and human a quality that we are not always certain of wisdom increasing with the advance of years. In some ways a greenhorn is more likely to see a new truth than one who has passed other truths by unnoticed for many years.

As a rule the older practitioner is distinctly more competent than the younger on the mental and spiritual side of disease. The elderly doctor *may* be incompetent in this field but the young doctor is almost sure to be incompetent, for his very training and scientific habit of mind, his very familiarity with all that is up-to-date, everything, in short, that gives the young man his genuine points of superiority to the older, tends to make him blind to the mental and spiritual life of sick people. His attention has been turned so strongly in another direction that it would be almost unnatural if he took due recognizance of those sides of his medical work which depend upon a full recognition of the patient's character and states of mind.

Another insuperable advantage possessed by the physician who has practised medicine for a long time in one city is that he may have a chance to see that a given organ, say the heart, is to-day in precisely the same condition as it was five or ten years ago when he studied and recorded its condition. This knowledge, which is of the greatest value in

predicting the outcome and understanding the present nature of the case, cannot possibly be possessed by one who has but recently begun practice. I examined recently the heart of a young man desirous of enlisting in the army. His heart showed an unusual sound—what is known as a " murmur," which would probably be sufficient to cause his rejection if he were examined by anyone who had never seen him before. But as I had had the opportunity of listening to his heart from time to time over a period of thirteen years and knew that this " murmur " had remained entirely unchanged during the whole of that period, while no other evidence of heart disease developed, I was able to write a letter which will, I believe, make it possible for him to pass his medical examinations and to enlist.

A mature practitioner's knowledge of family characteristics gives him further an undeniable advantage in competition with a younger man. Knowing the parents and the other brothers and sisters in a family, through having attended their illnesses over a long

period of time, he ought to be able to interpret a puzzling or peculiar symptom in a younger member of that family better than any greenhorn could.

Still another advantage possessed by the doctor who has practised for many years in a single community and gained the entire confidence of certain people, is his capacity to work therapeutic miracles by reason of the "expectant attention," the apostolic faith of those who have come to put their trust in him. The capacity to work miraculous cures is generally understood now-a-days to rest upon the extraordinary faith or expectation on the part of the patient. Such a faith takes time to build up and a doctor fresh from the medical school can no more expect to possess it or to make use of it than he can share the memories of the oldest living inhabitant.

CHAPTER VII

City Practice vs. Country Practice

In country practice, or in work done in a small town, the necessity of standing on one's own feet and doing almost every kind of medical and surgical work after a fashion and without help from those skilled in particular branches of work, tends to develop self-reliance and resourcefulness of a high grade. A man wholly lacking in these qualities can sometimes make a living in a city, but almost never in the country. It is certainly true that men of low grade of ability can get along somehow in the city. They are men who would be driven out of practice altogether if they tried to work in the country.

Country practice has an undeniable claim on those whose natural instincts and affections draw them to the country rather than to the city, for as I have already said, a man is most likely to succeed where he is happy and if his taste for country life is old and strong he will have to work against a great obstacle in case he settles in a city.

At the present time the great majority of physicians would prefer, I think, to work in large cities if they could be sure of succeeding there. The difficulties of getting started are probably what deter many men from city practice. The larger income open as a possibility in city practice and the advantages in education, recreation and the like, weigh very strongly with most of the men whom I have known. Yet anyone who settles in the city to-day must give up once for all the ideal of becoming the family practitioner, the patient's guide, counsellor and friend—the type described in "Beside the Bonnie Brier Bush" and other stories. In many ways this is a great loss. But I do not think it is possible to do satisfactory work in this sort of practice in the city. In the country where specialists are not available, one is perfectly right in taking all kinds of practice and becoming the single arbiter of all the medical fates which confront a family over long periods of years. Accepting such a responsibility one grows into very close human relationships with a family, relations often lasting

more than one generation. Since the sort of friendships thus formed are among the very best things in life, anyone who gives up country practice must realize that he is foregoing his chance for one of the greatest prizes that the medical profession can offer. He must also realize, as I have said above, that his own personal development and character will probably be ampler in country practice than in city practice.

Against these powerful advantages he must balance the disquieting fact that in country practice a conscientious man is often aware that his patients are not getting the benefit of the best medical knowledge and skill thus far developed. He must realize that his diagnoses are often wrong, more often, that is, than would be necessary in city practice and that his treatments, consequently, are often at fault.

If he is skeptical as to the part played by medicine and surgery in the cure of disease and thinks that nature does most of the work anyway, his own limitations will not trouble him much. Otherwise, they may be a considerable source of worry to him.

In city practice a conscientious man can obtain the help of others who are skilled in the branches of medicine where he himself is deficient. If he cannot give his patient the best, he can get the best for him—at any rate, in many cases and when hospital facilities are fairly adequate in the city where he has settled. Yet the division of responsibility between different physicians often has its drawbacks for the patient as well as for the physician himself who becomes narrower than he needs to be, oftentimes, because it is so easy for him to avoid making good his own deficiencies as long as he can always call on somebody else when he is at a loss. Moreover, in city practice, one misses much of those intimacies with an entire family which make so much of the best rewards of country practice. When one doctor attends the children of the family, another the father, and another the mother, no one of the three physicians is likely to be as happily intimate with the whole family group as any one of the three would be if he took care of the whole family.

To keep up with medical progress, to keep growing and to share the inspiration which comes from realizing and helping on the development of one's professional technique—all this is far easier in the city than in a small town. Hospital experience, of the type that teaches us most, is possible only in a large city. Noted leaders of medicine are to be heard, now and then, in the larger centres, but rarely in the smaller towns. Public health work, with all that this means for the prevention of disease and the enlightenment of practitioners, can hardly be said to exist at the present time except in large cities.

I take it that to-day the majority of physicians who settle in the country do so because it is easier to get a start there. Some income, even though a very limited one, may be expected during the first year's work, while in the city this is altogether problematical. Moreover, the cost of living is much higher in a city. Anyone who has not a nest egg in the shape of savings or capital, finds it very precarious to face the difficulties of getting started in the city.

CHAPTER VIII

The Influence of Drugless Healing, Christian Science, Osteopathy and other Special Cults on Development and Success of the Doctor

While patent medicines are surely less used by the relatively well educated classes to-day than they were fifty years ago, there is an increasing number of supposedly educated people who forsake their doctors, not for patent medicines but for some form of unorthodox healing.

Christian Science appeals only to a very limited class of people, though within that class its appeal is very powerful. Far more widespread to-day is the confidence in osteopathy or in the latest off-shoot from this stock, the chiropractor. Homeopathy bids fair to-day to die out within a short time because it is becoming increasingly obvious that the differences between homeopathy and the old school practice of medicine are so slight as to be negligible. Homeopathy flourished

only so long as it was persecuted. Now that its practitioners are received into the ordinary medical societies and welcomed in consultation by doctors of all schools, their influence seems to be on the decline. I think that the homeopaths have suffered more from the competition of the osteopaths than from any other single source. People go to a homeopathist often because they do not want to take drugs in the ordinary quantities. But the osteopath goes the homeopathist one better, for he gives no drugs at all, so long as he practices in accordance with his oath of registration. To-day the osteopath, in turn, is beginning to suffer by competition with the chiropractor whose education, being even briefer and more deficient than that of the osteopath, has cost him less and whose prices are therefore often lower.

Besides the groups of unorthodox practitioners just referred to, there are, of course, a multitude of healing cults and irregulars of various types, such as the Chinese herb doctor, the proprietor of magnetic healing springs and numberless others.

Competition from all these sources is good for a well educated physician, in certain respects. In the first place it takes away his absolute and unchallenged authority. No one ought to have that sort of authority. It is good for us to be forced to hold our own without any advantage of this sort. Criticism challenges us to make good and if we are not "the only pebble on the beach" we are much more likely to hold ourselves up to high standards of performance. Our natural tendency to slovenly work is opposed by the consciousness that our mistakes and shortcomings play into the hands of irregular practitioners.

Moreover, we are constantly reminded, especially through the activities of the Christion Scientists and osteopaths, of real faults or shortcomings in our work. It is the doctor's traditional and habitual disregard for the mental side of disease that has created and fostered the growth of Christian Science, New Thought and other cults which often lay undue stress upon the influence of the mind over the body and accent the importance

of religion in all that vitally concerns the sick man equally with the well man.

So long as psychology and the study of personality are altogether neglected in our medical schools as well as in our pre-medical education, we shall continue to suffer from the competition of those who are strong where we are weak.

Another weakness of orthodox medicine is this: The patient who goes to a doctor's office ordinarily gets no *immediate* relief for his sufferings. He gets some advice or a prescription but though these may lead to improvement later on, he ordinarily feels no better when he comes out of a doctor's office. The osteopath, on the other hand, can give him immediate relief. People go to his office sick and come out of it less sick. It is true that the relief is often very transient and that one has to go back again and again to get treatments. Nevertheless, so long as we continue to " want what we want when we want it," we shall be thankful to whoever will give us some alleviation of our sufferings without delay. It should be

pointed out however that the weakness of osteopathy, corresponding to the advantage just described, is that osteopathic treatment tends never to come to an end. One goes back again and again instead of getting radical cure, or where that is impossible, settling down to bear one's ills, with or without a grin.

We are often asked why we do not add the perfectly real relief which the osteopathic treatment gives to our armamentarium of remedies. Why should we not advise people as to hygiene, give them medicine and surgery, where those are needed, and *also* manipulate their sore bodies, as the osteopaths do? The simple answer is, I think, that most doctors do not like that sort of work. If they had to make a living with their muscles primarily, they would choose some other occupation. Why, then, doesn't the doctor refer his patients to osteopaths or to skillful masseurs for the immediate relief which he cannot give? Sometimes because he fears competition and is afraid he will lose his patient. Sometimes because he realizes that the osteopathic theory is absurd, even though its

practice may be decidedly successful. Sometimes because he believes that the patient should have either radical study of his case, such as leads to the finding and removal of the causes of disease, or, if this is impossible, should live his life in spite of his troubles rather than acquire the habit of accepting treatment every few days.

On these points it must be recognized that the patient may have a different opinion. I have set them forth to explain rather than to justify the doctor's attitude.

The irregular healers of various cults have their vogue not only for the reasons just given but also because they generally unite in condemning surgical operations. A patient is told by a doctor that he must have a surgical operation performed. He naturally dreads it and seeks relief elsewhere. The Chinese herb doctor, the Christian Scientist, the Osteopath all agree in telling him that he needs no operation. This is an immense relief, especially as in many cases no disaster follows disregard of the surgeon's warnings. This is possible, of course, only because far

too many operations are to-day advised. As long as surgeons are as reckless as they now are in advising operation, the irregular practitioner will continue not only to flourish but to do a certain public service in encouraging people to disregard the surgeon's false advice.

Among the *disadvantages* of the rank growth of irregular medical cults at the present time is the encouragement that it gives to sheer fickleness and faithlessness on the part of the sick. Anyone who does not get well as fast or as easily as he thinks he should, is naturally tempted to blame his doctor. Sometimes the doctor is at fault, but not always, by any means. The presence of osteopathy, chiropractice and mental healers of various types, advertising their wares by legitimate or illegitimate means, tends to increase the natural fickleness of mankind and brings upon reputable physicians not only such blame as they often deserve but also quite groundless and unfair criticism. For the patient, as well as for the doctor, a frequent change of medical attendants is most undesirable, sometimes disastrous. This evil

is more rampant the less education and the less common sense people have; but it is more or less prevalent everywhere to-day. Another, though less costly, evil resulting from the multiplication of unscientific healing cults is the mental disorganization and dissipation resulting from their attractive presentation of false theories as to the nature of disease and its cure. I believe that all the healing cults, from Christian Science down, do a certain amount of indubitable good. But many people are prone to argue from this fact that the theories behind the cults must also be more or less true. The inference is unsound. The theories or supposed discoveries back of the successful work of the osteopath and the Chinese herb doctor are obviously and demonstrably false. To accept them, nevertheless, because one finds that their practice gives relief is very bad for mental health and tends to loose thinking about many matters more important than health.

Another evil, to which all the heretical sects of healing contribute to a greater or lesser degree, is the attack which they make

upon public health by measures introduced into the legislature. When the anti-vaccination cranks are to the fore, they are apt to be supported by Christian Scientists, osteopaths and other irregular healers whose total influence upon legislators may be very considerable. Every advance in the effectiveness of public health administration is apt to be fought by this dangerous combination. They unite with the anti-vivisectionists, the vegitarians and other special sects to obstruct work which may be of vital importance to the public health.

CHAPTER IX

The Influence of Important Public Health "Crusades" on Medical Development and Medical Practice

1. THE FIGHT AGAINST TUBERCULOSIS

The oldest and most important of the crusades against disease which have started within the present generation, is that against tuberculosis. A good example of how such a crusade, conducted in considerable part through newspaper publicity, may react upon the work of the private practitioner, is given in the following letter.

"In the early fall of 1902, I was much annoyed by an irritated throat, which caused a constant hacking cough at any attempt to talk. Conversation was difficult, for it occasioned a dry hacking cough constantly.

"In December, 1902, or January following, I began to have profuse night sweats, which continued until September, 1903. I

was told by my physician that these night sweats should not be checked, as it was the means of eliminating great quantities of poison from my system. The sweat suddenly ceased upon the use of Tokay grapes something over a pound a day. At the same time my secretion of urine very largely increased. The grapes may have had nothing to do with it, but there was no other change in my diet or mode of life at that time to which I could attribute the change.

"During the months of January, February, and March, 1903, I suffered from what my physician termed "grip." My throat became more and more troublesome. He tried various remedies, which had no effect. Early in April I attended a funeral in which I was one of thirty packed into a small, unventilated, low, hot room for nearly an hour, during which I perspired profusely. I was then seated in an open carriage, sat a long time in the wind, was shaking with cold when I reached home, and was very much worse immediately following. For a fortnight I coughed continually, night and day. My

throat grew painful, my cough very much increased.

"My regular physician fell ill. About June first, 1903, I consulted another physician regarded as eminent in his profession, and a man of long experience. I had then lost about ten pounds in weight. He examined me carefully, examined my sputa, found tubercle bacilli, found my water showed a large amount of uric acid. He physicked me severely for about three weeks, during which time I lost eight pounds more in weight. I protested using physic longer, but continued to take six large tablets a day, the nature of which I do not know, from about June first to August first.

"During this period of two months, nothing was said to me in regard to out-door living, and I stayed nearly all the time in a room lying upon a sofa with doors and windows closed to prevent people from hearing my disturbing coughing. I suffered great lethargy. Immediately after breakfast each day I would find it almost impossible to prevent chills. Had to hold hot water bags and

get my feet in an oven each morning. Soon, a feeling of lethargy would come over me and it would seem almost impossible for me to move or stir. During this period of two months, my digestion was excellent. I ate very heartily of nutritious food, a large amount of beefsteak, and two boiled eggs twice a day, and at the end of each meal took in addition three raw eggs beaten up in water added to a pint of milk with a few teaspoonfuls of brandy. Reported daily to my physician in whom I had unbounded confidence.

"Beginning with about the 25th of July and continuing for about ten days I inhaled at the direction of my physician, a preparation which he directed me to inhale three times a day as deeply and fully as possible from a very long-nosed atomizer. Each time it made me nearly crazy. I would simply jump up and down for five minutes following. I protested to my physician against its use, but he insisted it was very important, and the usual remedy in a case like mine. At the end of ten days my respiratory organs had become unendurably sore and my cough

very much increased, so that I coughed almost constantly night and day. I then tried the experiment of spraying my skin externally with the preparation, and found that the spray created a blister that required a week to heal. I then refused to use this longer. I afterwards learned that the preparation consisted of alcohol, chloroform, and creosote. The odor of creosote was very strong. Since that time I have taken no manner of medicine other than one lithia tablet, much of the time, daily.

" About the first of August, my attention was called to the four articles in the *Review of Reviews* for June, 1903, in reference to out-door treatment of tuberculosis. I then began to read everything I could find touching this treatment, and through the months of August and September kept out-doors a good portion of the day and under the advice of physicians, took as much exercise as possible. After my afternoon naps would chop low limbs from small pine trees.

" I was examined August 11, 1903, by an eminent specialist on throat diseases, of

Boston, who assured me that he found no trouble with my throat, and regarded its then condition due entirely to over-treatment. During September my throat much improved, became practically well and has not troubled since. During August and September, I drove out several miles from my house daily in the morning, remained all day, and returned at night. This was an unusually dry period, and the streets were very dusty. It often seemed impossible to endure the rides, so heavy, dull, and tired did I feel.

" The last day of September I was examined by a specialist on tuberculosis, and a few days later received Dr. Flick's little book on the prevention and cure of tuberculosis, for which I had previously sent, and which was published about October 1, 1903. *From the specialist and from this book I learned that exercise was not beneficial.*

" My temperature during June and July, I was informed about the end of that period by my physician, had been 103°. At that time I knew nothing about 'temperature' nor

fever, nor consumption nor its symptoms. I had been intensely busy over matters in my own profession. I understood during those two months that my lethargy, or dull, tired feeling was due to sluggish liver.

"During September my temperature ran about 101° from say ten to six or seven. October 1, I ceased taking exercise and driving; remained on my back porch all day, taking my meals there, and I slept in a room with five windows, two on the north side, one on the east side, which were open half way, and two upon the south side which were taken out. When the extreme cold weather came I had to put in the south windows to save plumbing in my house, but slept with two windows down, one on north and one on south side.

"During the months of October and November I increased in weight twenty pounds, and about the 20th of November my temperature had become normal and had no rise."

The moral of this document seems to me this: A patient who otherwise might be at the mercy of whatever degree of ignorance

his family physician might be doomed to possess, is, through the channels of a popular magazine, given a chance to climb out of the Slough of Despond. Similarly, a practitioner to whom modern discoveries might otherwise not be conveyed with any degree of urgency through the dull columns of scientific medical magazines, may through the livelier and more insistent appeals of newspapers, circulars and magazines, or through the still more appealing channels of popular lecture or neighborhood gossip, get hold of truth which otherwise he would miss.

The modern treatment of tuberculosis rests chiefly upon facts which were known for many years before they were put into practice. Indeed many of them have not been put into practice yet, for example in France and in the more isolated sections of this country. To bring medical practice up to the level of the best that is known has needed, in the field of tuberculosis, a propaganda started and carried on largely by laymen, then taken up and forwarded by state and municipal authorities, women's clubs,

anti-tuberculosis associations, and other bodies representing the pressing needs of the consumptive himself.

All this publicity and common talk is against medical traditions. That things should be done quietly, decently, and without advertising is the time-honored custom of organized medicine. The old adage that "a little knowledge is a dangerous thing" has impressed itself so deeply upon the mind of the medical profession that it has prevented doctors, until very recently, from taking the public into their confidence or attempting to put into the sick man's hands the knowledge necessary for him to take his part in the fight against disease. Doctors in the past have thought that they must do it all, and that the patient should not be allowed to waste his strength or bewilder his mind by trying to fight disease himself. A change in our beliefs upon this matter is now reacting favorably I think not only upon the health of the community, but upon the development of the private practitioner towards better knowledge and control of tuberculosis.

In another way, moreover, the doctor is stimulated and jacked up, by the modern anti-tuberculosis crusade. The lay members of this crusade quite naturally "play the game with their cards on the table." They have nothing to conceal. They deal in a refreshingly direct and simple way with such patients and families as may be influenced by their educational propaganda. The doctor who for generations has been accustomed to soften or color the truth in order to save the feelings of his patients and keep them cheerful and content, has now to meet competition with the methods of those who believe that everybody who has, or is in danger of having, tuberculosis needs all the knowledge he can get, and should be dealt with in the frankest and most straightforward way. Health officials, social workers, public health nurses, now talk about tuberculosis in a way quite revolutionary from the point of view of the every-day practitioner twenty-five years ago. To one who believes, as I do, in telling the truth in medicine, all this is great gain. Truth tellers in competition with those who

try to give the patient something better, are sure, I believe, to win out, and this will be one of the surest means of converting physicians to a belief in total veracity as a potent weapon in the cure of disease.

Moreover, habits of direct dealing acquired in the management of one disease, like tuberculosis, are pretty sure to spread and to revolutionize the methods used in dealing with other diseases. Thus the whole lump of medical conservatism becomes leavened.

The anti-tuberculosis crusade was also the first step in rendering it possible for reputable physicians to appear in the public prints and daily papers as instructors of their fellow-citizens. Until comparatively recent times it was considered unethical for a physician to talk for publication. It appeared that he could do so only to advance his own interest, in other words, as a means of advertising himself. It is probably true that every physician who now talks for publication on matters of public health does advertize himself and benefit his own pocket to a certain extent. But the crying need of general edu-

cation about health and disease has made us now willing to condone or even to encourage the appearance of medical men in the newspapers, provided they never discuss their own private ideas or proficiencies, never suggest directly or indirectly that the reader should patronize the writer, but confine themselves wholly to bringing home to the reader what he needs to know about his own health and about diseases which may attack him. Until recent times the doctors who are the only people of unusual competence to discuss medical matters in public, were not allowed to do so because of the limitations of medical etiquette. This blunder has been remedied, largely owing to the urgency of the lay members of the anti-tuberculosis crusade, who have enlisted the services of physicians as lecturers and publicity writers.

2. ORGANIZED EFFORT TO CHECK INFANT MORTALITY

IT has long been realized by the specialists in children's diseases and by others usually cognizant of the facts, that infant mortality

Playthings—an aid in the office when examining young children.

could be considerably curtailed through teaching mothers how to take care of their children. The old idea that women have a congenital skill or hereditary intuition in such matters has gradually been broken down, as we have come to realize that the care of a baby is something which can and must be learned like anything else. This is not the place to discuss the good effect produced upon public health by the spread of this knowledge through the agency of societies for child hygiene, for pure milk supplies, and the like. What interests us here is to note that the best knowledge about the care of young children has been, through these lay agencies, forced upon the attention of the medical profession as a whole, in a degree that has proved vastly beneficial though it still leaves much to be desired. What the physician failed to learn in the medical school or from medical journals he is now on the way to pick up through lectures, circulars, and gossip emanating from one or another children's crusade of lay origin.

A good deal of the teaching which now

comes to young mothers either through lay agencies or through the physicians themselves, tends to cut down the physician's income. I have told elsewhere[1] a true story which I may be here permitted to repeat.

I was talking once with a physician who was telling me how he had lost practice and money in the treatment of babies.

He said, "I do not now see one baby for every ten I used to see."

I said, "Well, why is that?"

"It is like this," he said. "A lady called me up the other day, and told me her baby had a little trouble in his bowels. 'I have stopped all food,' said she, 'given water in plenty, and one-tenth grain of calomel every hour for five doses. Is there anything else I ought to do for the baby?' I said no, not just now. 'Well,' she said, 'if the baby is not better soon I shall want you to come and see him.' But the baby was better, and I was never called. I had taught the mother

[1] A Layman's Handbook of Medicine (Houghton Mifflin Co.), p. 155.

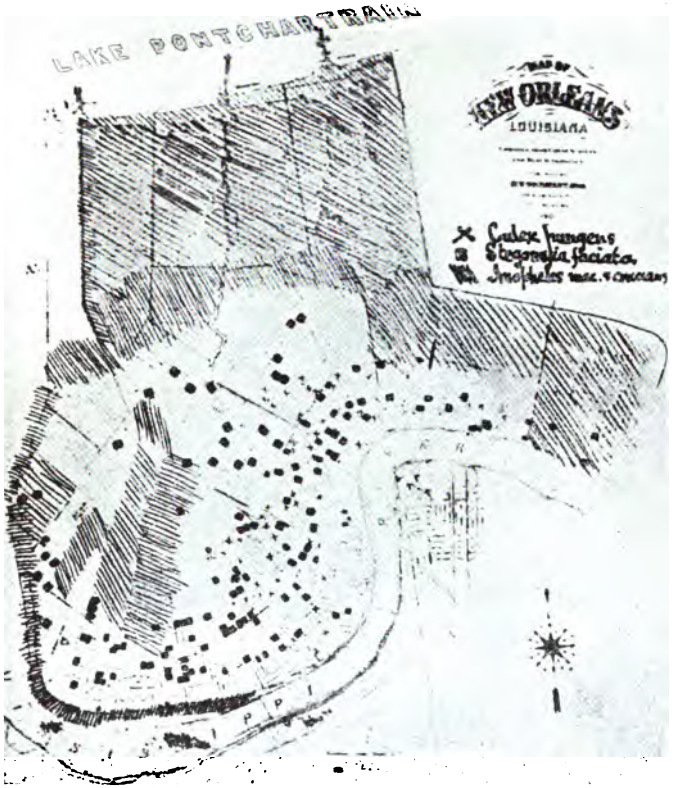
all she knew and most that I knew about babies."

This occurrence shows how an educational impulse, starting often through non-medical agencies and adopted by the physician himself, is often carrying him very much beyond and against his own pecuniary interest. He feels the public good so insistently and sees so clearly the direction of its advance, that he forgets himself, sacrifices himself without stopping to think of his own interest. Surely this is for the good of the profession, as well as of the public.

CHAPTER X

The Health Crusades Against Typhoid, Malaria and Other Preventable Diseases

The active work of public health officers and sanitary engineers in tracking down the sources of an epidemic of typhoid fever or septic sore throat,—tracing it to an infected milk supply or an impure water supply,—is of value in the development of the practicing physician, not only because such work brings him stimulating competition as because it keeps before his mind an attitude about disease which he is always in danger of forgetting, the attitude, namely, of a *militant attack* upon the sources. The doctor's prime business is to discover and to treat individual cases of sickness. But the community will never be satisfied with this alone. It always looks to the doctor for some effort of prevention, some effort for the wholesale destruction of disease as well as for sniping activities



A mosquito-map of New Orleans; fly maps should be made in the same way. (After Boyer.)

against particular cases. This may be called the "harrying motive" or the abolitionist's motive. It is the chief business of the health officer and through his activities it is brought from time to time within the ken of the doctor who otherwise tends to forget it and to stick to his ordinary activities at retail. Disease, as it happens along and appears at a doctor's office or through a telephone call, must be attended to with the best of the doctor's ability, but he is in danger of forgetting that from the public's point of view, this is only one of the ways in which he can fight disease. As people undertake radical campaigns against inundations from the ocean, against river floods, against insect pests, so militant and systematic attempts to root out disease must go hand in hand with efforts to cure individual cases and to save suffering. Modern public health work tends to keep the doctor up to his job on this side of his work.

The crusade against poliomyelitis, or infantile paralysis, has been absolutely unsuccessful so far as any effect upon the disease

is concerned. Yet it has been stimulating and useful to the medical men because it has brought their diagnostic activities into competition with those of experts trained by unusual experience with this particular disease. During the recent extensive epidemic in New York City, the N. Y. Board of Health employed expert diagnosticians to verify the private practitioner's findings before allowing cases to be admitted to the public hospitals. This sort of checking up by experts is very salutary for all of us.

CHAPTER XI

The Private Practitioner's Competition With Group Medicine

Group medicine, or the effort of doctors and others to work in teams, with proper subdivisions of labor and specialization of function, such as is characteristic of other departments of industry, is a feature of modern medical work viewed often with hatred or alarm by private practitioners. The most familiar form of this antagonism is directed against hospitals, which are the oldest and most obvious form of group-work for the benefit of sick people. In the past, hospitals at which group work was done were almost exclusively for the poor and were not therefore brought into comparison with the work and the efforts of the private practitioner to earn his living. Of late years, however, hospitals, especially of the type started and maintained by the Mayo Brothers, at Rochester, Minn., have begun to furnish to patients of

moderate or immoderate means the same opportunity for study by groups of specialists representing different sides of medical work as has long been available for the poor in the better free hospitals of the country. The competition which thus arises is not a competition between individual doctors, but between doctors as individuals and a group who work together as a team, each doing the part that he has fitted himself especially to do and dove-tailing in with the work of others similarly skilled in other fields. This sort of a working group, provided it is honest and above-board in all its methods, is bound to bring home to private practitioners the anomaly of their isolated and unorganized position, especially now when the complications of medical diagnosis and the varied types of skill needed in medical and surgical treatment are becoming more and more elaborate. Outspoken hostility against groups such as that organized by the Mayos, is now beginning to die out since the overwhelming success and public approval of the plan has made its position secure. Such group work is therefore

multiplying very fast and is bound to keep the private practitioner constantly on his mettle if he stays out of such groups and to urge upon his attention the desirability of getting into one of them.

I have already referred to the work of public health laboratories and public health diagnosticians as one of the elements helping to keep the private practitioner up to date. One of the most striking examples of the advantage of public over private enterprise in the field of medical diagnosis and treatment was revealed at a recent meeting in Washington, D. C., at which the Health Commissioner of one of the leading states of the Union said that the Board of Health in his State was now making salvarsan ("606") at a cost of 40 cents a dose and doing Wassermann tests at an actual cost of about 30 cents per test. In the open market Wassermann tests cost from $5. to $25. and salvarsan from $3. to $5. a dose. This kind of contrast between public and private work cannot long continue when once the public becomes enlightened.

The more enlightened employers of large *industrial groups* have begun within the last ten years to organize medical care for the employees, to hire physicians on full time and thereby to give the practitioners of the towns wherein these industrial plants are situated a demonstration of what group work can do both in the profession and in the treatment of disease. The medical department of such a corporation views disease *wholesale* and in the aggressive spirit which I have already described in connection with public health work. The vital importance of this attitude to the community is therefore kept before the physician practicing in the neighborhood of these plants.

The work of the *public health nurses* representing private philanthropic groups, life insurance companies or municipal health boards, should be and often is a potent aid to the practitioner who would otherwise be discouraged in undertaking the care of patients in need of constant nursing and unable to pay for it. The attendance of a nurse makes it possible for the physician to visual-

ize the condition of his patient during the many hours when he himself is not in attendance. Thereby, with the nurse's help, he gets a much truer idea of what is going on and should be enabled to shape his treatment more effectively. This is always the case except when the nurse is so well trained and the doctor so illtrained that her presence and knowledge constitutes a challenge or a criticism which he resents and fears. The nurse, then, appears either as a doctor's efficient aid or as his enemy. To the better type of physician, she is always and only a benefit.

The *health work organized in public schools* under municipal auspices and generally called the medical inspection of school children, is still in its infancy in this country and as yet has not advanced beyond the stage of enumerating diseases and defects unremedied. Only in the field of dental work have we, in a few cities, advanced beyond diagnosis to treatment. Thus, at the present time, medical work organized under municipal auspices in schools comes into comparatively little contact with the practitioner's field of

work, and as the salaries of school physicians are generally too low to attract high grade men, one cannot say the medical profession has been benefited to any extent in its development or organization by municipal school work.

Another agency which has modified very strikingly of late years the attitude of the average patient to the average doctor is the mass of *health tracts, health circulars and health essays* sent out through the great life insurance companies, through the daily papers and the magazines. The quality of this literature is now, on the whole, very high and the amount of accurate information thus being conveyed to the public is large. All this educational effort should make it easier for the practicing physician to accomplish his natural tasks for the patient. The medically educated patient knows what to expect and can accept more docilely what his doctor has to impress upon him. Moreover, the patient can co-operate far better (because more intelligently) in the measures of relief which the doctor has to present. Every honest phy-

sician prefers to practice among intelligent people and hence the great bulk of medical literature and medical information now reaching that portion of the public which reads, makes it more satisfactory to practice medicine today than it ever has been before in this country.

PART III

THE REWARDS

CHAPTER XII

The Rewards of Medical Work

Before describing the rewards which a doctor may reasonably expect to find in his professional work I wish to give some warning as to what he should not expect. False expectations die with less pain if they are killed off in youth or if possible in the egg. Hence in a book meant for those expecting to study medicine it seems well to forestall, if I can, certain disappointments.

THE DOCTOR'S FINANCES

Among the rewards which the doctor cannot expect is wealth. Few doctors have ever grown rich from their medical fees, and if I read the signs of the times rightly the number of doctors with incomes above $5000. a year is going to be smaller in the future than in the past. Especially in America where the number of doctors in proportion to population is greater than in any other country, it stands to reason that each doctor will get less than he needs for comfort, unless indeed

it could be shown that we are especially prone as a nation to call (and pay) a doctor and no one else when we are sick. But in fact the reverse of this is true. We call at an apothecary's shop and ask him to sell us something "good for a headache" or "for dyspepsia," "something to give one an appetite," "something to make me sleep." Or we buy a bottle of patent medicine, a kidney plaster, some cough drops or an "electric belt." Should we happen to dislike medicines there are the osteopaths and the chiropractors, the magnetic healers and the hypnotists, the Christian Scientists and the New Thoughters, any of whom will take our case in hand with alacrity.

Moreover all these men and manœuvres are cheaper than the doctor, and since the American is fond of bargains in every department of his existence and forever hopes to get "as good an article for less money," he is tolerant and credulous with all health fakirs and medical short cuts.

Financial rewards, then, are not comparable in medicine with those to be earned in

other fields by men of equal ability. But far worse than the smallness of the doctor's income is its uncertainty. A grocer can count on his customers to a considerable extent, since every one must eat every day. But people who were sick last year cannot be relied upon to be sick again next year. Epidemics of typhoid in the autumn and of scarlet fever in the spring cannot be relied upon as in the days when all health boards were ignorant and sleepy. Some health boards are now active enough to check diphtheria or smallpox, and the number of such boards is steadily though slowly increasing. Great slices may at any time be cut out of a doctor's income by the instalment of a good water supply, a pure milk supply, or an adequate Pasteurization system. Even the anti-tuberculosis crusade and the campaign against infant mortality have begun to eat into the doctor's returns. School hygiene, public lectures on medical topics, newspaper publicity on the methods of preserving health,—all these factors are not only formidable but incalculable. One can have no

confidence that next year's receipts will bear any definite relation to this year's.

The only way out of this difficulty is to become a salaried health officer, an office not yet desired by the great majority of physicians.

I have known few physicians fail to get a living in medicine, but the number who make comfortable incomes is equally few. Some idea of the incomes of Harvard Medical graduates can be gained from the following figures:[1]

AVERAGE EARNINGS

Year in Practice	CLASSES									
	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
1st.....	$866	$787	$541	$362	$625	$502	$350	$533	$425	$1237
2d.....	827	1089	790	995	773	826	588	1250	874	1083
3d.....	1181	1539	1412	1295	995	1262	1353	1025	1370	1578
4th.....	1505	1694	1720	1566	1559	1765	1963	1575	1632	1835
5th.....	2027	1556	1966	1981	1818	2359	2347	1847	2150	....
6th.....	2341	1837	2333	2277	2547	2997	3202	2360	....	....
7th.....	2527	2161	2654	2967	3043	3650	3545	....	....	....
8th.....	3003	2491	3155	3042	3337	4332	....	....	....	....
9th.....	3560	2900	3616	3604	4500	....	....	....	....	....
10th.....	3524	2963	4135	4535	....	....	....	....	....	....
11th.....	3885	3691	4604	....	....	....	....	....	....	....
12th.....	4422	4130	....	....	....	....	....	....	....	....
13th.....	4680	....	....	....	....	....	....	....	....	....
Max. no. of men.	38	39	29	39	33	26	29	29	25	26

[1] Loc. cit., p. 60.

GRATITUDE AS A REWARD

Another reward which the budding doctor must learn not to expect is gratitude. He also gets abuse where thanks is due. He is thanked when he doesn't deserve it and left unthanked when he does. On the whole he comes out about square, so far as the expression of gratitude is concerned. His service is often its own reward, needing no expression of gratitude in words. But if he is expecting that his labors will be duly appreciated by those he works for he will often be disappointed.

SUCCESS IN TREATMENT, A DUBIOUS REWARD

Sometimes a doctor can get his reward in the awareness that he has foiled disease and cured his patient. But if he is honest with himself and intelligent about the respective rôles of nature and man in the cure of disease, knowing how huge is the contribution of nature, how minute the efficacy of man and his remedies in all except a few of the diseases he combats, he will not often be able

to say: "I cured him. I pulled him through." As a matter of fact as I look back on twenty-five years of medical work I can remember but two patients whose lives I believe I saved. Often we hope that our advice, our medicines or our surgery have had a good effect, perhaps a decisive effect. But when we read medical history and see how often our grandfathers' medicines must have done harm, how often the patient must (so far as we can see) have recovered in spite of treatment rather than because of treatment, we cannot but wonder how much of our present up-to-date therapeutics will appear useless or worse than useless in the wise hindsight of our grandchildren.

Money, gratitude, and technical success, then, cannot be our rewards. Let us look in more promising directions.

SOCIAL APPROVAL

This is a medical age. Education, philanthropy and industry are deeply tinctured by medical analogies and medical ideals. So-

cial workers talk about "social *diagnosis*" and "social *treatment*." Even an engineer is apt to speak of the "diagnosis" of the bit of natural scenery which he is asked to make or mar with a bridge, with a railroad or with an aqueduct. The newspapers are full of medical items and medical articles. The difficulty of getting medical topics discussed in magazines and newspapers has now been transformed into an almost uncanny but very positive demand on the part of these agencies. Almost any medical book or article can get itself published. On this evidence it seems to me fair to say that no other profession excites today so large a measure of public interest in all classes. For our age is especially attuned, both by its strengths and its weaknesses, to understand and to sympathize with the medical point of view, just as it is fundamentally out of tune with the artistic and philosophic interests of man.

On this wave of public interest and approval, the medical profession is now riding, either for good or evil results. I am clearly aware both of the good and the harm in this

situation, but just here I am concerned only with its advantages. Few people of us realize, until it is taken away, what public sympathy does to enhearten us. To lose it and to feel that the world is against us is one of the most benumbing and paralysing sensations in the world. This sensation, to some extent, every theologian and nearly every artist must feel today in America. The public is out of sympathy with these activities, or views them with more or less amused cynical tolerance. Of course this indifference does not prevent art and theology from ranking amongst the highest things that a man can do. Our indifference merely proves that they are today out of fashion.

On the other hand, to be in fashion, as medicine today is, strengthens the resolves and sharpens the wits of all who are concerned in it. Our medical concerns are everybody's business, partly from their intrinsic interest, partly because everybody feels that he may be a patient tomorrow. Nearly everybody is aroused by the interest

of medical discoveries, such as are popping off almost daily in the medical press.

One of the rewards of medical work, then, is public sympathy and approval,—if not with my particular deeds or yours, still with the endeavor which medical men represent and the hopes which we cherish.

MEDICINE USES ALL HUMAN POWER

A more durable reward results from the fact that medical work is more prone than any work that I know of to engage all the resources of a human being. It calls out all our powers. Although in one sense medicine is a specialty, in a more important sense, it is a profession which can use the whole of a man as no other profession can. Thus it keeps us young. The powers that are trained in wood-craft and in athletics ordinarily lie dormant and gradually degenerate after a young man has tied himself into the harness of his profession. He gets fat, butter-fingered, and footless. The keenness of his sight and hearing, the deftness of his hand, the effective application of his most powerful

muscles, all die out when he must follow the calling of the minister, the lawyer, the financier, or the teacher.

In medicine, on the other hand, we need and train all the powers of our senses. A physician's eye cannot be too sharp, his powers to seek and to find cannot be too well trained for the work that he has to do with the microscope or the scalpel. In the examination of blood or of the substance coughed up from the lungs, in the search for bacteria, in the diagnosis between benign and malignant tumors, and last but most of all in the study of the patient's physiognomy, he needs and uses all the power that as a skillful huntsman or woodsman he may have acquired in his younger days. A lawyer or a minister has little use for swift, accurate movements, nor for the more violent muscular efforts which are developed in football or baseball. But a doctor has constant use for them. When he is measuring blood pressure, when he is testing nerve and muscle reflexes, when he practices any department of surgery,—above all when he takes his part in aiding so

far as he can the labor of a woman in childbirth—the physician may need all the muscular strength, all the manual skill and knack that in his younger days he may have accumulated when he lived, worked, and played out of doors. What use has a financier or a manufacturer for special keenness of touch or hearing? Any keenness of hearing that he has learned in woodcraft or in music goes for nothing in the practice of his profession. But the doctor's ears can never be too keen to identify and distinguish sounds which he hears through the stethoscope in the heart or lungs of his patient.

Now if it is true, as I believe, that human happiness consists to a considerable extent, in our opportunity to use, not only one or two of our powers but all of them, then surely it is one of the greatest rewards of medicine that not only our brains but our senses, or muscles, and our co-ordinations can be put at the service of our patients and made of value in our professional work.

It keeps us supple in mind and spirit to use every faculty that we possess, to take in

at every pore the typical human experiences as we meet them in men, women and children, in the rich and in the poor, in the well members of the patient's family as well as in the sufferer himself. Familiarity with the Jew and the Gentile, with the Italian, the Irishman, and the Negro, all coming in the course of our regular work, tends to awaken and to exercise the interests which in many a professional life must lie unused. In banking one meets chiefly men; in the drygoods business chiefly women. In teaching one comes in contact with only a single stratum of youth. College teachers get the impression, they tell me, that the whole human race consists of boys between eighteen and twenty-two. This may be altogether too easy or it may be distressingly irksome, according to the temperament that faces it; but in any case it is narrowing and cramping.

THE PHYSICIAN, A PEACE MAKER

A third and most signal reward of medical work is this: we carry with us a flag of truce in all the wars that divide man from man. In

bitter political contests one may be the physician and so the intimate friend of combatants on both sides. The disputes between labor and capital do not prevent the doctor from being intimate with members of each group, who forget, in relation to him, their "class-consciousness." I have been told that, in one of the labor wars of Colorado, when the strikers were put in the "bull pen," the only persons who passed freely from the outside to the inside of that stockade were the physicians. In the present world-devastating struggle of Europe, it is only the physicians and nurses who can work alike for the Allies and for their enemies.

This advantage goes far beyond the domain of friendly feeling. It gives us harvests of deeper knowledge and so of greater powers; for it is in the atmosphere of friendliness that we are enabled to get close to the true facts of any man's or any woman's personality. Hostility shuts us out, not only from the reaches of good feeling, but from contact with the genuine facts and forces that make up the other man.

AN OPPORTUNITY TO TEACH

George Meredith has said that there lives a school master somewhere in the breast of every man. We all have a latent desire to teach somebody something. No physician lacks this opportunity. He need not be a professor. His patients always look to him for instruction; indeed, they almost force it out of him. The physician's tiniest talents for instruction are thus nursed into life and energy by his sense of a real need for what he has to teach.

This part of medical work grows more and more important every day, for preventive medicine, the livest of modern hopes, is built up not only through public instruction, but especially through the lessons passed on individually by doctors to their patients and through them to families and neighborhoods. Moreover, the kind of teaching that doctors do is that which brings most satisfaction to teacher and pupil. It approaches the ideal, exemplified in Dickens' "Nicholas Nickelby," when Squeers says to his pupils: "W-i-n-d-e-r: winder, now go clean it."

Theory is put into practice at once. Instruction initiates action and is winnowed in action. You are never long in doubt as to whether your pupil understands you or not, for what he does within the next day or two will make it plain. Could any teacher ask a better opportunity: Is this not the type of teaching which all who follow that calling long for?

MEDICINE NOURISHES EVEN THE TINIEST TALENTS FOR SCIENCE

The rewards that I have pointed out so far—the ability to conserve the talents of youth in the facilities of sense and muscle, the opportunity to get friendly with all sorts of conditions of men, women and children, the chance to cut across the enmities and divisions of men with a flag of truce, the call to the teacher latent in most of us—all these are but half the blessings of being a doctor, for they all lie upon one side of that division which separates our activities into the *arts and crafts* upon one side and the *scientific interests on the other.* Not all of us have any

real bent for science,—not all even of those who call themselves doctors. But I think it is safe to say that if anything will rouse a man's interest in the pursuit of truth, if anything will lure a scrap of scientific interest out of his breast, it is medical work. A physician is almost forced to take an interest in the truth that he learns from day to day in the souls and bodies of men. He can hardly escape being drawn out of the field of merely practical or merely financial interest, into the disinterested pursuit of truth, at any rate, for a few minutes a day. For medical progress is so rapid and so obviously useful, its applications are so many and so grateful, that its science soon ceases to seem the cold and inhuman pursuit which to many it now appears. To be able to practice a profession in which the pursuit of truth pays, and pushes itself under our very noses in the midst of our utilitarian and money making activities, is surely a great reward.

THE CHANCE TO LEAD

Another reward of medical work is its opportunity for the exercise of authority and

leadership. Patients and their families often go to the doctor for guidance, confide in him their intimate and sacred concerns as to no one else in the community. Not even the minister of religion hears such confessions and gets the opportunities to apply such common sense and idealism as he may possess to the straightening out of human difficulties. Many of us have no instinctive desire to be the recipient of personal confidences or to be looked to for guidance in such crucial matters. Yet as we settle into the maturer activities of our working life, I think there grows up in most of us a more or less honorable desire to influence by advice and guidance the course of human affairs. Bentham taught that in democracy everybody should count as *one,* nobody as more than one. In the ultimate test of ballot-casting, on election day when the campaign is over, Bentham's rule is doubtless correct. But except on election day this ideal has little place. Men and especially women will always and should always follow leaders. The right to lead, not by an arbitrary advantage of place and

power, but by the possession of knowledge or skill in some particular field of endeavor, is a deeply human right—one that should be possessed somewhere, sometimes and in some degree by every man and woman. Even the child is often rightfully our leader, as Christ taught us.

This right of leadership is at any rate desired, for good reasons or for bad, by almost everyone. In vulgar parlance, we like to be able to " swing things " and to have the casting vote in decisions of importance. In medicine such responsibilities come to us naturally and inevitably. We are consulted about family quarrels, about family expenditures, about the problems of education and moral guidance, the problems of sex and honor, which are mixed inextricably with the physical make-up of those for whom we work.

Of course no man is fit to be a leader in so many struggles. No one is an expert or an authority in such diverse fields. But where so many commands are offered it should be possible with modesty, yet with self-respect, to accept some that are within

our competence. Moreover, when all the superior officers are dead or absent, even a second lieutenant may be forced to lead.

For anyone who has developed, either in college or later, an interest in the most important, the most vital, the most practical of all life problems—those of *philosophy and of religion,* it is surely a great reward to be given the opportunity to apply what he believes in a way to help human beings in trouble. We may think, while in college class rooms, that it makes no concrete difference how we settle or desert the problems of free will, theism or immortality. But in medicine these problems are thrust upon us, urgent as a bleeding wound. They need immediate attention, immediate solution, so far as we have any power to solve them or to help in that direction. Not a week passes in the practice of the ordinary physician but he is consulted about one or more of the deepest problems in metaphysics and religion—not as a speculative enigma, but as part of human agony.

It may be that one has decided, once for

all, to turn aside from these questions, to live upon the surface of life and risk its cataclysmic shocks, unprepared. But if one has any desire to go to the bottom of things, to be thorough instead of superficial in one's dealings with man, fate and nature, then medicine gives one an unparalleled opportunity for the development of such powers.

* * * * * * *

If there is any power that a doctor does not need in his business, I do not know it. If there is any man who can say with earnestness that he "*counts nothing human foreign to him,*" then surely medicine is the job for him, the path along which he can find the goal of his desire. For nothing human is foreign to the work of a doctor—not the lowest or the highest in our nature, not the best or the worst, the most realistic and minute, not the most scientific and modern, not the most classical and permanent. All these summon the physician to stand upon his feet and make his contribution before he dies. All contribute to his reward.

REWARDS OF MEDICAL WORK

The physician is the child of his age. Such an opportunity as a great painter had in the Renaissance or a great musician had in the early years of the 19th century, a physician has to-day. The scientific and mechanical, the utilitarian and practical eagerness of our age, finds an outlet in him. But the deeper and more permanent hungers of the human race, to search for truth and to spread it, to love and serve our fellows and to know God, also find their natural expression and development in the practice of medicine. It is not a lucrative pursuit. It brings few to fame and renown. It is hard work, never finished in any eight or eighteen hours a day. But its rewards, as I see them, are beyond those of any other profession.